

GENERAL METHODS OF TEACHING

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New York Toronto London
McGRAW-HILL BOOK COMPANY, INC.
1922

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Library of Congress Catalog Card Number: 51-12944

PREFACE

This book is an attempt to get a new view of teaching in order to secure that freshness which is needed if our work is to remain vital. Watching modern teachers at work made it apparent that they were not stumbling along on any fixed routine. Rather were they alert and informed strategists, using the vast resources now available for school and college life, always in new forms and original ways. Though guided as much as earlier teachers by an ethic and a doctrine, they nevertheless did no preaching. Rather did they arrange programs of things to do, things which, in the doing, became a commentary on themselves and on life as it should be lived. Watching unobtrusively in the background, these teachers were always active to see that the distillation of experience was gathered and conserved. Such teachers used comparatively few words, but those few were apt and telling. Being remarks on life during the living of it, these words were easily understood by learners, and were obviously a revelation of truth.

These better teachers seemed to me to be producing a program in a way which resembled the production of a play. Not that the program was in any sense *play*, for it was basically good hard work. It was of a serious nature, durable, and often arduous. But the pupils, being cleverly involved in good living, could not resist living well for themselves and for others.

Such an approach has seemed to open up a remarkable vista of good teaching. The attempt has been made to present this, as much as possible, always in its true and real sequence. Each process of teaching has been set forth in the order in which it occurs while the teacher is actually at work. This is a teacher's view of teaching. As such, it should

benefit both those who are preparing to teach and those who are actively at work in schools, either for children or adults.

There was a time when teachers of education in our colleges preferred an analytical, scientific view, in which the parts of the machine were studied, classified for reference, but never set in functional order. The type of textbook used, by its topical organization, favored didactic teaching, cross questioning, and the hearing of lessons. It made for intellectual development of a sort, and gave the student an analytical understanding of the subject of education. But it left to the teacher the problem of putting together the pieces of the puzzle as best he could during his own work of teaching. Today, however, teachers of education are turning away from this inevitable early stage of their profession to a new stage, now possible. With the passing of crude methods of teaching education, the teachers of today prefer a combination of example and precept which reveals teaching in its whole and living form. Thus, by consideration of experience and principle, real growth in teaching ability becomes possible. This textbook is adapted to the needs of this superior teacher of education, who is himself a provider of experience and its interpretation, and so is a master teacher.

A. GORDON MELVIN

CUERNAVACA, MEXICO

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Chapter 1

THE TEACHER'S TASK

The theater has fascinated people of virtually all times and countries. In a certain sense, a school is very much like a theater. For does not the good teacher produce the class program in a way which may be compared with that of the producer as he works to get his play on the boards? In both cases the process may be full of excitement, but it also involves hard work, and often much discouragement.

This analogy, though admittedly only partial, is worth pursuing further. So we note that the producer must first have his script. Let us suppose it is that virile and reliable classic *Macbeth*. Although Shakespearean productions have been known to fail, no producer expects this for his play. Consequently, in the beginning, there is nothing but faith and a dream, a dream which must be made into a reality. First the play must be cast. There must be a rugged Thane of Cawdor, and a tense and telling Lady Macbeth, who, along with all the other actors, must be discovered, and trained to play a good part. Furthermore, the cast must work as a team, for while each person plays a separate part, all are essential to the whole. The stage must be appropriately set and lighted, to point the full drama of the sleep-walking scene. For all concerned there are hours of drudgery and exactitude. Each rehearsal is a struggle, with moments of apprehension and moments of hope, until at last the great first night arrives, and the play goes on. The testing is in the living, and, when the performance is over, actors and audience alike must bear, as best they can, success or failure.

The school program is very much like this. The teacher is its producer, and the play that classic, the curriculum. The curriculum is the original script, and the teacher must write into its ancient elements a modern plot. The pupils make up the cast. But there is no question of choice, for come who may, the play must go on. The actors are all immature, so that they must be painstakingly trained. They must be inspired until they have knowledge of their parts, clear speech, and willing hearts. They must develop poise and character, and learn to bear the drudgery of tryouts and rehearsals. For the performance of the school is but a preview. The testing is still in the living, and as they play their parts in school, so will these pupils play them out on the larger stage of life.

This state of affairs is far different from the traditional picture of the teacher as a solo performer. The teacher once took his model from the preacher. His was the priesthood of knowledge, his the litany of the lesson. If the pupils were "miserable sinners," there was hope for them through following good advice. It was for them to listen and learn, to acquiesce and obey. Conformity led to reward, even to ultimate grace, that a pupil should become as his teacher.

He who attempts to master a group singlehanded, whether he teaches youngsters or oldsters, is still an amateur. When he first awakens to the hollowness of this strategy of teaching, he has taken the first step toward maturity. He has had the first inkling that teaching is a social process. He has caught a glimpse of the fact that he is living with a group of other human beings, and that, through them all, he must reach them all. Through the group he must touch the individual, and through the individual he must touch the group. Henceforward his house of cards is in total collapse. He can no longer be smug. He must begin afresh, for he sees that he is no longer alone. He will always be one of many brethren, the first of a new and growing family of friends.

He is now ready to undertake a long exploration in a

wide country. Up to now he has taught by himself, but from here on he must learn to live with others and teach them how to live amicably among themselves. This is the great human problem, and in its solution lies the solution to the problems of war and peace.

In what actual order does the teacher meet the elements of his work? No matter whether the pupils are children or adults, the basic problems and their general sequence is the same. There is a definite order in which they tend to occur in the actual process of teaching, even if this simple order is often complicated by the interweaving and overlapping of elements. This order may be set down as curriculum, class program, the pupils themselves, their behavior, content of learning and meaning, method and technique, group and individual development, the social implications of teaching, psychological implications, criteria and values, evaluation of teacher and pupil accomplishment. Consideration of these elements, in this order, can help any teacher, at any stage of his training or of his teaching career.

This is a book about teaching for all interested teachers. The kind of teaching described here is valid on the graduate level, throughout college, in high school, elementary school, and kindergarten. It will also serve preteachers who are studying for their profession. True there are many variables, and each element of teaching finds different interpretation in every classroom, and in schools for advanced and beginning pupils. In spite of the modification which must be made in every type of classroom and at every level, teaching is basically the same. Whether the teacher is teaching in the top levels of the university, in the teacher-education division, in a school for adolescents, or in a school for children, good teaching demands skill in exactly the same basic elements of good teaching.

Consequently, what is said here is intended to apply to all teaching. Examples given to illustrate generalities must, since they are specific, always come from a specific level. Many of these must come from the elementary school, since

the best teaching tends to be found there. This is due to the fact that far more thought and care have been given by the human race to teaching children than to teaching adults. Whenever possible, examples from advanced levels are included. The over-all pattern, however, is the same for all levels.

Even the most experienced teachers remain good only by a constant process of reeducation and self-criticism. To consider himself in the light of what is said here can provide a self-check for any teacher, no matter how skillful he has become. College teachers, teachers of education, high school teachers, and teachers of children will find here a scheme for analyzing and remaking their teaching. Either this, or these lines are a failure. In short, this book is offered as a compendium of teaching. It is certainly set forth from a point of view, as all value writing must be, but its validity lies in its universality. Furthermore, it is so flexible and variable that through it can come the natural freshness and newness of good teaching.

Chapter 2

DOING BRINGS LEARNING

Human beings cannot be forced to learn, though the attempt to force them is constantly being made. So suicide was rampant in the days of the Japanese Empire. The mood of that society was hard. Children, perhaps, were full of laughter, and laughingly they crowded about the writer's knees in a Tokyo elementary school. The little ones were but gently molded, but in adolescence the pressures became severe. Youngsters were studious, and the bookstores were jammed with them, for examinations were rigorous. As social dictates and thought control closed in, the young man soon faced utter acceptance of orthodox thoughts and the cast of an unrelenting society. He had to conform or die; for many of the most sensitive, suicide was the only way out. Those who lived on played the game according to the rules, many finding compensation in art among the most artistic people on the earth. For them, to learn was to obey, and education was a rough road. Scholarship was profound, and teaching was simple. But of all the simplicity, what was the end?

Good Teaching Is Complex

To the layman or the amateur, teaching always looks simple, the work of the teacher a sinecure. For crude notions of teaching persist, way beyond the day of crude machines. It would seem that the teacher merely reads up in books for years, then brushes up the day before the lesson. Going to the class with an index of ideas from an old file, he talks from point to point. We all recall the story of the

student who, giving an answer ahead of the next question, startled the inquiring professor by telling that he had his father's notes. In such a case, the pupils listen, and then take notes or perform exercises while the teacher rests. They are tested, marked, and branded, then dismissed for the day, for the term, or for life. Yes, this does go on today in colleges, in high schools, and something like it in some elementary schools. The younger the pupils, the more they rebel, not having been broken in to the ways of society. Thus rise behavior problems, "bad children," punishment with its name softened into the term *discipline*, and the use of force to solve problems by human subjection. In colleges, objectionable forms of hazing sometimes break out, or perhaps students retreat to fraternities where they may compensate by nonconformity.

The simplicity is a false simplicity, bought at the price of resiliency and integrity. Yes, good teaching is complex. Just as medicine, once a matter of pills and potions, has become a tremendous tangle of symptoms and specifics, so teaching has become complicated by the increasingly intricate and increasingly understood phases of human personality and society. Human beings need to be freed from their fears and limitations, but the freeing of a human being is an infinitely more difficult process than the subduing of him. So one can no longer teach on a shoestring. For teaching has become a demanding profession; the teacher must be not merely a scholar, but also an expert in human relations. Furthermore, his character must be so developed that he will give, freely, talents which his pupils will subsequently be paid for. Even if society should begin to support him sumptuously, he would still be worth more than he is paid. For only the expert liver can become the expert teacher.

The fact that human learning is a matter of human *action* complicates teaching with all the elements of life itself. For he who is willing to allow his pupils to come alive, and to take over their own living, will find that he has created a thousand new problems, which only great knowledge and

wisdom can solve. The confusion which may result is almost too alarming for most teachers to contemplate. It is only seeming confusion, but it requires expert direction. Lacking this, some teachers find it bewildering, so that they prefer to play safe and hold back.

Consider what would happen in a single classroom should the teacher finally permit natural human action of his pupils. If the sources from which the professor usually prepared his lecture were made available to the pupils, several of them might divide it up and present it with more freshness and less monotony than the single teacher, and the teacher might supplement it from his further knowledge. Or pupils might fetch their own specimens, from ponds, fields, and rock pools, develop their own laboratory program under guidance, and build their own museum. A class in literature might take over a column in the school newspaper, or run a poetry society and issue an anthology of the year's poetry. High school pupils might operate a school store. If they could not build an automobile, they could certainly take one apart and find what is there. Some have held their own art exhibit, and others have written an original play based on a classical tale or on current happenings.

Many elementary schools have long engaged in this kind of living. Children often make, in school, such things as a sturdy chair for a younger brother, or a set of glazed bowls to use at home. In the best schools, one may commonly see a play based on a Mary Poppins book, or on a masterpiece like Marjorie Torrey's "Artie and the Princess." Many a community drive for books, toys, or clothing for the needy has been carried on with more devotion by children in school than by their elders in the community.

But the prospect of such programs may be upsetting to those not used to them. The insecurity which such ideas thrust upon some educators, many of them in college and teacher-training schools, tends to make them dismiss such programs as visionary, or even foolish. Some resent the fact that they demand revision of schedules, of methods of

teaching, of the list of things taught and of the order in which they are taught. Such a program breaks down the divisions between subjects, so that one cannot be sure that he is teaching only his own specialty. It would affect credits, and alter textbooks and the way they are used. It would demand more thorough establishment of one's philosophy of education, and it would bring community leaders into the school and take the school out of its four walls, bringing about a certain mingling with the community. Worst of all, it demands more than usual knowledge of human beings and great skill in developing individuals and in using groups as subtle means of education. It has meant all these things to those elementary schools which have pioneered in this direction, and it has meant all these things to their teachers. It will mean these things and more to all college, high school, and elementary school teachers who move in new directions. It is part of the struggle to keep in advance of changing trends which carry us all forward to better levels of living.

Areas of Uncertainty

1. *Will Not Precious Time Be Lost?* Problems press in upon the teacher who would move away from force and blind authority as the sole arbiters of education. One of the most pressing is the question of how one may actually teach all that should be taught, if pupils spend their time in overt acts like holding committee meetings in class or visiting art museums in school time.

Teachers have always found the time allotted them too little for all the values they were responsible to teach. If generous portions of time are allotted to doing and making things, is there not just so much loss from lecturing, discussion, writing, and reading? Is it not impossible to spend half the time in doing and making, and in the remaining half to accomplish what was previously achieved by the short cuts of talking, reading, and writing?

The error here is in the notion that the teacher is ex-

pected to carry on two programs instead of the familiar one, squeezing both into the same old amount of time. To do so would be obviously impossible. Actually there is but one program. The trips and the talking, the committees and the companionship, the reading, writing, and listening are all one. So it is when children visit the Statue of Liberty and make a book of words and pictures which tells about their trip. It all fits together. There is no loss, but an economy that nets a gain. Pupils who collect outdoor specimens and bring them to school search books to identify them; thus they learn by themselves what many teachers have to teach by oral instruction. In a school where an excellent talking picture of the Crusades is shown, a hundred things once taught laboriously, by many words, are caught in a moment. When a huge cross is seen pulled from a church, and two armies join battle, the onlookers gain a notion of the conflicts involved more firmly, and more quick'y, than they could from much talk and considerable reading. Thus they may still have time to study the conflicts of our own society, their nature and possible cure. Though things may be done in a different way, in a different order, at a different time, yet there need be no loss.

When the school comes to life, it is true that there is more to know about how to teach than before. Complex new analyses of teaching and a wider knowledge of a considerable number of teaching situations are essential. But the vitality which comes into teaching is very rewarding. It brings not two competing programs, but one unified pattern, in which happenings and interests dovetail with words, spoken and written.

2. *Will Not Character Be Neglected?* Some teachers draw back from the more active program because of the fear that it fails to develop character. They point to the breakdown they see among young and old, and often lay the blame on active methods, rather than on the widespread lack of them, and on the other rather obvious shortages of home and society.

Many a teacher feels that the older ways of doing things developed character in obvious and visible ways. Self-denial is required of adult students, who give up profit from earning and deny themselves an easy way of life just in order to study. Concentration is developed by the process of following along an intricate concept in a lecture or book, or in tracing through to the end of a problem in arithmetic or algebra. Staying powers are developed by sticking out the hardships of the school program, the stillness, the long periods of work, the strictness and discipline. So the dignity of authority based on tested truth is finally discovered. The seriousness of life in general is sensed, and the secrets and principles that guide all men in the good life are passed on to steady life and character. These are assets indeed, and had they not been accomplished for generations with some degree of success, there would be no civilization. But such gains are not lost in a more active program. They merely appear in a partially different setting.

The ideal way to develop character is through action. The most unreformed delinquent boy in one class made the highest score on a character test just because he had been preached at so often that he knew the answers. On the other hand, a college student who makes a study of the religions of the world in the hope that he will find the truth will be rewarded in good measure no matter what his conclusions. He may not conclude with the truth, but he will get glimpses of it which will stand by him as a result of his self-discipline. For it is self-effort which counts. A teacher who has succeeded in stimulating his students to take on worth-while tasks may safely relax, give himself up to the newspapers and newsreels of an evening, and still be ready to help his students to higher ground on the following day.

Pupils who write for the class newspaper learn the discipline of the deadline. When the deadline is passed, not even a good excuse will avail. A pupil who has promised to give a demonstration of a motor he has made, but who forgets to bring it with him, quickly sees the havoc caused by his

carelessness. He knows now that a change must be made in himself, and he knows it without any scolding by the teacher. Actually character is best developed in a setting, in a series of happenings. To some extent we do learn by principles, and tend to resist stealing because we are told to avoid it, or lying because we understand that it is harmful to ourselves and others. But cause and effect are less remote when we see what happens as a result of our own acts, as they work out before us among those with whom we live. Good teaching points these up, and makes us face ourselves and struggle to improve. Again, it is only by concentrating that a pupil can complete a story that is to be read in class, or finish the pages in an arithmetic workbook which keep him up to the universal standard for those of his grade. The gains that were made under the old training can all be there, but they are more effectively made because of clearer self-understanding and more direct experience.

3. *Will Not the Skills Be Only Half Taught?* Many teachers fear that under a more active method the old essential skills will not be safely taught. This should never happen, and there could be no reason for it except the teacher's neglect. Few skills are taught beyond elementary school. It is true that musical composition and musical and artistic performance require the development of considerable skill. Mathematics also involves a special skill element. But, on the whole, what is taught beyond the elementary school tends to be rather a complex of informations, knowledges, understandings, and only minor skills. There is nothing comparable to the five-year learning complex which children face in arithmetic, reading, spelling, and writing of the elementary school. Whatever is required beyond that which can be secured in such activities as contributing to a school periodical, or writing and staging an original play, may be learned by specially designed drill, just as it is done in the elementary school.

In the elementary school itself, a large part of the school day is given over to skills and drills. In the earlier years a

good deal of such teaching is either incidental or a capitalization on the incidental. Thus counting is not taught directly, but is picked up by counting the number of cups needed for orange juice, or the number of chairs needed in a circle. Doubling a recipe for cookies baked in class, or measuring the number of cupfuls or spoonfuls, provides actualized number experience. Such experience may have drill as a follow-up, as when pupils find out how much the cookies cost.

By the time the third grade is reached, many technical devices are used to provide special drill. Good textbooks in arithmetic or reading are highly skillful instruments, intricately constructed in series and attractive in diagram and color illustration. Workbooks in arithmetic are remarkably organized devices to support the drill program which a careful teacher provides. The incidental teaching of skills is in constant operation, as the affairs of the day touch on things which require measuring or reading. But in other periods of the day, the time is often fully devoted to carefully regulated, individualized drill. It cannot be made too clear that as pupils progress beyond the initial learnings in any skill varied forms of well-planned drill should be provided. Only thus do all pupils approximate the needed perfection and learn to read every word, spell every word, and perform each arithmetic operation accurately. The merging of the nondrill activities with the drill program, in balanced proportion, is one of the intricate problems each teacher must work out in each class. It is one of the least understood aspects of teaching, and often too carelessly handled. The full school day is a correct balance between more active affairs, such as painting a backdrop for a play set in Iceland, and the needed quiet study involving reading and writing, together with periods of orderly, sequential drill in spelling and arithmetic. Failure to arrange such a program is not the sign of a superior teacher, but of an incompetent one. Consequently, no teacher should attempt to teach two programs, one a series of fortuitous activities, another a concentrated

grind to make up for lost time. There should be one inter-organized program, the more complex part involving every kind of live and worth-while act, such as planting seeds or making a calendar, and also busy periods of significant, well-devised study and drill.

Few people realize that the heavy burden of complex skills falls almost entirely on the elementary school. Here is the most restrictive learning most people ever encounter in a lifetime. Later high school and college programs are delivered from the excess of drill required of children; this is the chief attraction of high school and college. So the opportunity of these higher schools to develop programs of sweeping significance and interest is far greater than that which falls to the lot of teachers of pupils in their early years. Consequently, teachers in high schools and colleges should not fail in making use of their fuller opportunities.

4. *Can Schooling Be Pleasant?* There are few ascetics in these days, yet there are many who believe that school life should be ascetic. Such persons view the pleasures of a well-arranged class program with alarm. In a good class or school, pupils are active in the responsible direction of their own affairs. They hold forums and present pageants, enjoy their choir or their choral-speaking group, take a nature trip or a sketching trip to the parks, and often enjoy life very much. There are some who believe that this is bad for the development of character. They believe in rigor at any cost. It seems to them that the restraint required to listen to the ideas of a lecture is more developmental than holding a forum, that enunciation is better developed by group drill than by choral speaking, that a study of a book on botany will produce more learning than a guided trip to the park, and that concentration when forced has special virtue in building the character.

What happens, however, is quite the contrary. Many are unequal to the rigor of the overrestrictive school, and leave it. True, the more capable and more emotionally stable learn and like it. But the world out of school is a live and

interesting place, a tremendous competitor to the school. Many cannot resist the bribes of a fascinating world which calls them so alluringly to give of their time.

Actually, all learners learn more when they give not merely their heads but their hearts to it. The fire of a true interest in literature or art or mathematics will result in more pupil devotion to work, more reading, more study than anything else. Pupils soon learn to give their effort where they have already given their eager interest. Character is best built in pupils by enlisting them in the pursuit of good goals, and helping them to enrich their own lives by wholehearted devotion to the tasks they have set themselves. Thus a nature trip to the Audubon bird sanctuary may awaken pupils to collect bird pictures; this may grow into much reading, study, and lifelong activity. It is from such experiences that pupils can move on into the enriched life. Happiness is not a trap for the unwary, but merely the sign of a well-lived life. A school in which pupils enjoy themselves and enter fully into their work is not a breaker but a maker of character.

5. *Can a Happy School Prepare Pupils for the Severities of the Actual World?* Those who are ready to agree to what has already been written are sometimes troubled by the fact that a happy school life will be followed by a world of hard knocks. Will not the pupils who are brought up to fulfill their best selves be unready for existence in a world far from ideal? In the world of business and of practical affairs, cutthroat competition is rife. Hardness and ruthlessness are required to enable newcomers to stand up to the practices of the world in which they must earn their income. If pupils are brought up in a world of cooperation rather than in one of competition, if they are gently treated and taught to treat others gently, will not softness come over them, which will unfit them for the struggle of real living?

If we were to take this argument at its face value we should proceed to train our pupils in corruption. We should

encourage the common practice by which pupil monitors act as bosses, and accept bribes from erring companions who do not want to be reported to the teacher. Such school customs have been a fertile training ground for corrupt ward politics. If we should train pupils to act as many do in the great world, we should give the nod of approval to students who find their positions as class officers, on student councils, and as editors of school papers not through merit but through favoritism. It is no more reasonable to accustom pupils to rough handling, maltreatment, and injustice than to train them for evil practices in a questionable world.

Students need no help from teachers to make life hard for one another. All the training in hard knocks that is needed by anyone, young or old, is amply provided by the general condition of community life, the ways of parents, the worries and fears all individuals allow themselves, economic problems, accidents, and sickness. Far from adding to these disturbances of the good life, schools should train pupils to observe their existence, study their causes, and find out ways of avoiding them as much as possible and bearing them when they come. It is only when pupils live together, in small active groups, that the cause-and-effect relationships in these human situations can be observed, understood, and lived out in a form of practical training. Conduct situations, once understood, can be generalized, so that bad practices in the social, economic, and political life of the wider community can be pointed out and traced to their root cause in human weakness.

There is good reason to believe that social progress is being made today as a result of improved living conditions in schools and colleges. Gains have come in the material things of life, such as better health, better and more correct food, and more convenient and more comfortable homes. These gains would not have been made if it were not for the educated men who brought them about. Schools were an essential part of the realization. In human behavior, improvements may also be noted. There are few pockets

of the untrained; almost all people make some constructive contribution in some form of productive work. The lines between good and poor social behavior are sharply drawn, and by reports in the press and on the radio are hung out like wash on a line, for all to see the habits of the families concerned and their results in living. Thus can come about a more active social consciousness, and, through it, campaigns to clean up centers of filth and decay which occur like ulcers on a sick social body. All goes back to the sensitizing of human beings so that they understand the causes within themselves of their own errors, and the way to expunge them.

Furthermore, the conditions under which men work are constantly improving. On the one hand, the working of personal machines and power cliques in businesses, schools, and churches are increasingly resented. They are recognized as means of thought control and modern methods of enslavement. On the other hand, older and cruder methods of enforced overtime, overwork, and unequal conditions for sexes and races are fading out. Working conditions continually improve, and there is demand for more capable and reliable workers. Gross human exploitation is no longer easy or common. This is partly because education has made human beings more conscious of their essential dignity. But it proves that in schools students should taste the nature of the good life. We need never fear that ideal living conditions in school will fail to equip pupils for the real world. Rather will good living change them deeply, so that having experience of the good life they will struggle to maintain it.

Even if the world were not becoming an easier and healthier place to live in, well-trained pupils would still be more capable of adapting themselves than those who were poorly taught. It has been frequently observed that pupils who move from a good school to a cruder one, where they find little help or guidance in their learning, at first go through a period of shock. But quickly analyzing the causes, they adjust themselves to the new conditions and often step

out in front of their more poorly trained fellows. Thus there is every reason to believe that a first-rate program of good living in school is the best equipment a student can have to help him fit into the world he must encounter, and make the best of it.

The Generally Accepted Foundations of Education All Support Active Programs

Better practices in school life are well documented, and rest on widely accepted philosophical principles. Such practices have been built up through the years by many teachers who have not had the full benefit of these conclusions. The pioneers of good educational practice have worked, very often, from their hearts, and by the intuition of an inner integrity, rather than from the book or the rule. While their work was, to some extent, hit or miss, they supplemented it whenever possible by studying the work of others. For many years educational workers have carried on independent statistical, psychological, and philosophical investigations. The work of years in all these fields has resulted in a consensus. It is not necessary to present this here, since it may be found in variety on educational bookshelves. It has laid in a background of sanctions for teaching which is so definite and specific that it cannot be questioned. It may be briefly summarized as follows:

1. Careful educational and medical studies have been made of the physical development and educational accomplishment of different age levels. These studies are thorough and relatively complete for infants and children. They have made it possible to know, with considerable definiteness, what children of specific age levels have matured to in arithmetic, spelling, reading, and other activities. For those of higher ages, many generalized and specific performance tests have been made. The results of such tests make it possible to forecast and confirm learning, and so make possible a certain gearing of the educative process to learners themselves.

2. Extended psychological study has made clear conditions under which healthy, normal development takes place in human beings. It has been established, beyond a doubt, that an emotional climate free from frustrations and tensions favors desirable development.

Educational psychology has, of course, gone far beyond this in making it possible to discover the causes of blocking and behavioral disturbances. But what is important here is the confirmation of that type of school practice, for the training of both children and adults, which favors freedom of choice and encourages creative living.

3. Finally, educational psychology has identified learning as a part of the larger pattern of growth. Human beings, along with plants, animals, and every created thing, are parts of one vast growing pattern. To understand growing and its full implications is to clarify and expand one's notion of learning. Great educators have been at one in their emphasis on organic concepts. Pestalozzi symbolized his meaning by a tree, Froebel by a garden, Marietta Johnson by a pine branch. Philosophy has made no greater contribution to the understanding of education than in its dictum that learning is growing. So the next lesson to be taught is always that for which the human being is at that moment reaching out. Thus the teacher is universally bound to teach not by command but by search. To try to discover what his student is just now ready to learn, and to teach him just that, is the art of teaching.

Do Not Hesitate

In order to teach well, one must take the plunge. It is fatal to hold back. There must be no waiting until every problem is solved. One must not refuse to teach according to one's conscience because one does not see all the way to the end of the road. To the good teacher, adventure is mandatory. If, for him, common ways are not good enough, powers and authorities lacking in vision, the good way is clearly the right way. Then he must make the break now—

today and tomorrow. He may not wait for the approval of authorities, for they will not give it. He must not wait for the encouragement of friends, for it will be missing. He must not hold back until he receives the sanction of society, for it will be withheld. His inner knowledge is his charter, and his responsibility is elemental. He must live and teach as one human being to another, and as one who would not withhold the light, or allow it to be dimmed. He must be resigned to do his self-chosen duty, come what may.

Problems Are the Natural Heritage of the Teacher

As a minimum, confusion may come. The teaching pioneer starts out with no map of the trail. He is content to know the direction. His experience will never be wide enough to cover all his needs, so for guidance he looks to principles and laws. In addition he will equip himself with every available aid. He will hardly be started before he discovers that, in spite of all he knows, he will lack certain necessary specific knowledge. He may be an expert on China, only to find that his pupils are inquiring about India. He will then study until he makes up what is missing. The response of his students will not be all he has planned or hoped for. Decimals or logarithms may mean much to him, but nothing to them. He will be forced to study his pupils' responses and adjust himself to them. He must show them their need or admit that they have none.

This will precipitate the search for method. And method may often be missing to fit a particular case. So he must become a maker of method. He must discover his pupil's goal, and invent a way to help him reach it. For instance, a pupil whose delivery is stumbling may be utterly unconscious of it. The teacher contrives to let him hear a recording of his own speech. The flaw will be so obvious that it will automatically convince and convert to learning.

On certain occasions the teacher's success may be sensational. A pupil whose imagination has been touched will go to great lengths to read on any subject or build toward the

fulfillment of any great desire. But sometimes the needed books or materials are not available. The only books that can be found are stodgy, dry, obscure. So the search goes on, and the teacher combs libraries and lists for what he wants. He may find it now, or only for some fortunate student later on. Or he may not find it at all, and be forced to compile his own material, or invite in visitors who can supply it.

Teaching has its ups and downs. Some things will go well, some things will seem to fail. There will be mistakes, detected and undetected. Some students will speed forward, and others lag. There can never be the satisfaction of a perfect score. So teaching proceeds from day to year—a continual process of self-examination, an endless struggle to improve, a steady consciousness of the fact that the unsolved problems have been atoned for by the ones which have been solved and that the failures are themselves proof of success.

Chapter 3

THE VALUES THE TEACHER HOPES TO PASS TO NEW LIVES

Once a teacher has a definite teaching mission or assignment, the first thing he must deal with is the question of what he is to teach. This means that he must face the matter of curriculum. *Curriculum* is a technical word which we do not seem to be able to do without, either in talking or in writing about teaching. If we sought an accurate substitute for it in common language, we might say that it is what learners do in order to learn. Its derivation from the Latin *curro* gives it a basic meaning of "the course that is run." *Course* and *curriculum*, having a common root, mean about the same thing.

Confusion sometimes results if we think of curriculum always as something which is written down. Real curriculum is whatever is actually done by learners, not what anxious teachers hope may be done. There is a commonly overlooked but sharp difference here. College and high school teachers are continually stressing what they call required reading. They prepare weighty lists with pride, and often instruct their pupils to read preposterous amounts. They frequently maintain the academic figment that students should do two hours of preparation for every hour spent in class. They then indulge in an absurd flight from reality by assuming that students read all they are told to read. If they have doubts that this is happening, they are inclined to force large amounts of reading by giving frequent tests. This vitiates the assignment, since students now read for

quantity instead of for meaning, for examinability rather than for personal or vocational significance.

The Gap between Supposed and Actual Curriculum

There is thus built up a wide gap between what the teacher supposes to be the student's curriculum and what the pupil's curriculum actually is. Some students read much of what the college or high school teacher assigns, others little at all, because they are counting upon luck, their general ability, or trickery to carry them through required examinations. But the rock-bottom reality is that pupils gain value only to the extent that the form in which it is provided seems significant, and to the extent to which the teacher enables them to see this significance or value. Many devices reputed to be potent are far from it. Courses drawn up in detail, unintelligible and dull textbooks, learning which is supposed to be compulsory—all these are mere dreams. They can never be made into more than approximations of reality, and then only by a teacher who is so supremely skilled in teaching that he is able to make students see good. To such a capable teacher the curriculum has its fixed elements, which he hopes all will achieve, but also those variables that the day and hour deliver to the teacher who is watching for pupils to reveal what they are now willing to learn. Although this teacher plays the same cards as any other teacher, he plays them not in predetermined order but as the game dictates.

In schools for children, this flexible technique is especially important. Even the seemingly fixed and invariable which harasses the work of the elementary school must be made flexible and variable. Theoretically, teachers know from the discoveries of educational research the exact order of difficulties in, say, words required for reading and spelling. They know the detailed sequence in which each step in arithmetic should appear, and they know just when children may be expected to read books of a predetermined standard of difficulty. But actually many individual children do not

comply with these expectations. If they are forced to give a semblance of conformity, when they are really unable to conform, they may learn to dislike their work, to copy, or to cheat and lie. Such children—and there are many of them each year—end with a fear of school which makes them flee it at the earliest opportunity. Fortunately, most pupils are able to comply with normal expectations. But when any child is not, the teacher must wait for that child, or destroy the very work which is being attempted. It is a law of learning that learning is unenforceable.

Outside the area of essential skills there is a vast realm of learning which has no place in the curriculum except in general terms, in terms of quality. It is not sound to say that no pupil should reach the age of twelve without knowing much about China, its people, their customs, and the land in which they live. But it is sound to say that no child, who is given half a chance to learn about other peoples, can fail to find himself interested in some other people and their land. So for one group of children interest may be in the Philippines, for another in the ways of England, and for still another in the fascinating ways of India. Nor is it possible, in a single group of pupils, to have each individual know exactly the same things about a given people or country. The blighted hopes of those who teach for the sake of testing, and to get uniform results, soon enable them to find this out, though doing so does not seem to cure them of their disease. Actually, value is not in specific knowledge alone, but in the way in which that knowledge meets the life needs of pupils who learn it. A group which works together to write and perform a play developed from a Chinese legend is served by the very difference of the activities which each individual performs in the whole.

Two children were heard conversing about their teacher. Said one, 'She doesn't really teach anything.' "No," was the reply, 'all she does is talk all the time!'

Teachers in college or in any school who think that they "cover" their curriculum by talking from one end of it to

the other, or by providing a mimeographed course synopsis with a list of amplifying readings, mistake the beginning of teaching for its end. To cover the curriculum at the end of one's tongue, or at the end of one's pen, is not teaching. Such teachers mistake the curriculum they dream about for the curriculum which becomes reality. A teacher is successful not because of the curriculum he proposes, but because of the elements of it which his pupils actually perform. How naked many teachers would be if they were clad not in what they do themselves but in what their pupils do. True curriculum is not proposed but completed learning.

Teachers Need a Written Form of Curriculum

All this points to the fact that teachers need to begin their teaching with a written account of what their pupils may normally be expected to do. There is a danger that this might subsequently be mistaken for real and compulsory curriculum. In fact it usually is so misunderstood and applied. Yet such a written curriculum is a necessity for a careful teacher. Those who argue to the contrary are merely substituting a less orderly *mental* picture for something they could write down in more efficient form should they cease deceiving themselves. Every teacher needs some flexible forecast of what his students may be expected to learn. Sometimes this is easily come by, but usually, especially in high school and college, it is difficult to obtain. For written curriculum should include more than a mere account of what is to be learned. If it is to function well, it should give some indication of what pupils may reasonably be expected to do which will make the learning naturally desirable. Thus the good curriculum includes not merely content, but also elements of both value and method.

Value is the rock bottom of all curriculum. This is seriously embarrassing, for it is value we flee. If we could get rid of this old man of the sea, teaching might be all merriment. Responsibility would be relatively small. Any performance would do; so long as pupils kept doing some-

thing, it might be safely assumed that satisfactory learning was accomplished.

It is value which is the stumbling block. Some teachers suppose that they stock their wares from an emporium of learning, just as they buy groceries, and distribute values like canned goods to the poor. But they deceive themselves. For each teacher is value in himself, and the value which he is, is the value which he finally teaches. In this sense, therefore, the teacher is actually the determining element in the curriculum. He is the selector of value, its arbiter, interpreter, and judge. In every move he makes he mediates value, so that value becomes his ultimate stock in trade.

Curriculum as Tradition, Custom, and Personal Expression

The values which determine the teacher's notion of written curriculum are of three kinds: traditional, customary, and personal.

1. *Traditional.* Most of what a teacher teaches is the fruit of race experience and practical progress. In terms of fundamental value there is an age-long testimony which is implied in much that is taught. We say, "Be good," "Do what is right," "It is your duty to do this or that," "Do not steal," "Do not kill." All such admonitions make assumptions of fundamental doctrine and racial experience. These things we accept almost unthinkingly, because they are implied in our very culture, though challenged in others. Our civic behavior is built about the acceptance of the belief that we should not steal or lie. Our legal code and our attitude toward human rights are based on truthfulness and on the belief that we should not kill at a stroke, or by slow exploitation, or even by neglect. Teachers accept these things, sometimes thoughtlessly, more often perhaps, because they have accepted the teachings upon which these beliefs are built. Such beliefs color all our daily teaching, and remain in the background giving a slant to all we do or say, and determining the experiences which we arrange for our pupils.

2. *Customary.* The customary elements in the values we teach account for by far the largest part of proposed curriculum. These generally include the acceptance of our national Constitution as the best possible, acceptance of our form of government as good, acceptance of the common institutions of our society as sound and run with integrity—the police, the political system, the law, marriage customs, and the conventions of eating, drinking, and social intercourse. Nearly all of these bases of a society vary from one part of the world to another. So teachers in these various parts of the world act divisively by teaching different customs and their related thoughts.

In addition to such basic things, there are the common conventions of society as well as a tremendous overhead of subject matter which changes more slowly than prevailing reality. Such conventions are the spoken language, which varies from place to place, the reading and writing of it, its spelling or the character structure, in case of such languages as Chinese. The vogue in arithmetic, one of the most widespread of human conventions, is only a sensible arrangement which might have been organized in twelves, for instance, if human beings did not have ten fingers which indicate a decimal system.

These general assumptions account for much of the usual curriculum of the elementary school. A great deal of it rests on nothing more solid than the convenience of changeable and changing custom. The usual curriculum proposals for the high school and the college often add, to those already mentioned, certain customary ideas and ideologies. Sometimes these are ideas, sometimes whole chunks or blocks of subject matter. This is no more true of mathematics than of philosophy, but examples are more clear-cut in mathematics, because of its sharp focus. Logarithms are widely taught, for instance, because they are functional in mathematical calculation. But very few pupils who are taught logarithms ever encounter any use for them after school is over. In philosophy, the customary distinction between

idealism and *materialism* is a mere convention, obscure and of little practical value, serving merely to prevent a more clear analysis. Although biological evolution is a changing concept, it is usually taught as a fixed value. Hordes of cats have been captured by alley raiders and dissected without aiding the industrious students to anything more than an accidental understanding of the healthy functioning of their own bodies. All these blocks of subject matter came into colleges at some specific time, when they were regarded as functionally useful, just as Latin came in when it was needed as a universal language of learning.

3. *Personal*. All teachers are continually, day by day, determining actual, on-the-floor curriculum. Yet no teacher is able to do this properly who is not able to see, with lightning clarity, that which holds its place in curriculum as mere assumption, custom, or accident. He must see through the transparencies of curriculum to its true skeletal structure. Without this power he cannot penetrate to true significance in his teaching. But many teachers are naïve in this. They trot out their set of tricks, and believe that they have taught well when their trained students perform in the examination circus. And the show goes on.

Nowhere is penetration and insight more needed than in the area of current events. Most poorly known and most transitory is this field. The pageant of the daily newspaper is ever with us, here today and gone tomorrow. Yet it is in the work of today and tomorrow that life is to be lived. Consequently the values which are permanent, in past and current civilization, must be focused on these current happenings, and they must be seen against an illuminating background of eternal verities. The teacher who cannot teach current events without prophesying that the dictator prepares his own doom, and the aggressor organizes his own ruin, has not enough insight to teach history—past, present, or future.

So here, as elsewhere, teachers are faced with a stone wall of value, and the personal acceptance of value. The

teacher is a moralist, willy-nilly. What he accepts as the value context in which he teaches affects every major and minor decision he makes. If he is unaware of the mastery of value, and the way in which he himself is subject to it, he is too confused to be a good teacher. Perhaps, by blind acceptance, unworthy of a human being, a teacher may accept dictated values, either those of a written curriculum or those of a system which orders what is to be taught. But in this case the teacher's values are those of a slave, and by teaching them he helps to enslave his pupils. This, then, is the meaning of academic freedom: not to be a slave. And the only deliverance is to hold a clear understanding of personal value, which alone makes a man free.

Out of a firm conviction of personal value, which all great teachers of children or adults must have, comes the power to inspire. Only with such clear view of what is real and important in life is the teacher able to detect what is functional at the moment of teaching. What can the learner use now? What will promote his functioning, his growth, his living, his liberation? The teacher must make this judgment over and again, as he writes his proposed curriculum for a long period, as he imagines the lesson of the hour, as he teaches the individual of the moment. Is there a special country to which the students may seem to be drawn during the coming term? Is there a story which seems to be catching their imagination so that they might care to dramatize it tomorrow? Is the lad who asks that freedom of speech be withdrawn from a fellow student who has said something unwelcome to be, himself, permitted to address the class? This has happened, and it will happen again. What shall the teacher do? What is functional to the moment? To know the answer is to be a teacher who stands for value. This enables him to rule the moment of learning, so that good learning will prevail.

Only thus does a teacher succeed in his highest purpose—to enable his pupils to create new value. The field of learning is constantly changing, so that the garment that was

curriculum yesterday cannot cover today's nakedness. Pupils must learn to make something new. With small children it may be a picture, or a story never told before. With older children, perhaps it is a new invention for operating a shadow play, or a new story to be dramatized. In college it is such a thing as a short story worked out in an English class and published in a college publication or elsewhere. In the graduate school it might be the synthesis of some new chemical compound. Such originalities are the height of learning. Since they cannot be fully forecast, teachers must have solid learning of a universal quality. Only this will support students, young or old, through a maze of variables into a new and valid outcome. Consequently each first-rate teacher must be an arch curriculum builder, one whom lesser teachers can never equal. Such are the great teachers, seldom known, because their ways are hidden. They are too subtle and too disturbing for the common run.

The careful teacher of old or young, as he approaches a new teaching work, should, without fail, prepare a written draft of the curriculum he proposes. This is a rigid requirement. The only exception imaginable is that teacher who substitutes a mental for a written curriculum, which would have been better. To write a personalized curriculum is the teacher's first task.

How to Write a Personalized Curriculum

Since writing a personal draft of proposed curriculum is an essential for all teachers, at every level, it is well worth while to outline a method which a teacher may follow in this task. This must be begun with an initial exploration into relationships. What is the maturity of the pupils in the direction of the things to be done? What will they be learning and doing for other teachers? What is the time allotted, and how does it limit or free opportunities?

To begin with, the teacher may ask certain other questions as he prepares to write out a practical curriculum guide for his own use.

What Is the Major Goal of This Particular Venture in Learning? What would pupils entering this situation naturally think to be their major goal? This major goal, if clearly understood and agreed upon in the same terms by both teacher and pupils, can clarify and unify all that is done. It can bring all the varied activities of the whole program into a working unity.

When, as is often the case, the teaching of the whole institution is broken up into parts and subparts, this may be difficult. A teacher of Anglo-Saxon might have a struggle, and end with something like this: "To enable the student to do value reading in Anglo-Saxon, in a setting which will widen his powers in the use of his own language." A teacher of history might decide that he was teaching in the hope that his pupils might "use facts and information to secure projection value in personal and social actions." A teacher of science might feel a very similar responsibility for a similar goal. If so he could work very closely with the history teacher, and perhaps with a like-minded teacher of philosophy.

The goal is likely to be particularly clear in the case of directly vocationalized teaching. A teacher of method in elementary school reading might consider his pupils' major goal to be "learning how to direct elementary school children in their efforts to read." The major goal may be much less clear when the teacher's responsibility is general in every sense, because such a teacher must be all things to all pupils. A teacher of a specific grade in the elementary school might write down the major goal somewhat as follows: "To have pupils do the many different things which will help them meet the next stage for them, individually and as a group, and in all important directions." Whatever goal is forecast, however, it should be written down. When teaching begins, later on, it should be set before the pupils for consideration, possible modification, and final agreement. If pupils and teacher see themselves working together

for the same thing, they will work together more willingly and successfully.

What Do I Accept as My Teaching Assignment? No matter what one teaches, one never teaches everything. There is always a framework of limitation. Usually this is set by the place the group holds in the total of the school or college. Whenever teachers share a pupil, either in successive terms or in the same term, a serious social contract is involved. Teachers should always cooperate and coordinate the work they do with the work of other teachers of the same students. They are responsible to include, and in a much less rigid sense, to exclude. In the elementary school, a teacher is usually given a group of an expected standard of maturity; the assignment is to teach forward from where the children actually are. In high school, the sharing is of a more difficult nature, involving what students did in a previous term as well as what they are doing with other teachers in the current term, all students and teachers working together toward a vague goal which might be stated as "personal and social liberation." A teacher acting as a co-teacher with others faces drastic limitations. Such a teacher cannot honestly teach alone and willfully, but must work as a member of a team. This state of affairs might seem too obvious to mention, were it not often violated. As these lines are written, one brilliant young man is unable to hold a college position because he regards his own personal contribution to be so great—and it is great—that he will not share part of the total pattern and work with other teachers. He demands the right to teach only his special contribution. Thus his potential students, his family, and he himself all lose materially. Few schools are without some teacher who is unwilling to bring the allotted teaching area into proper focus, but who insists on introducing personal values in distorted relation to the assigned core.

Am I Furnished with a Clear-cut Written Assignment? The area of limitation under which a teacher works is often made clear by some form of suggestive statement. In college

this is sometimes no more than a course description in the bulletin, a description often written by the teacher himself. When many teachers cooperate to teach a standard course, such as English, an extended description of the common ground they may work in is usually furnished. If the teacher is intelligent, if he can accept these suggestions and then personally rewrite his own curriculum forecast, he can teach most successfully.

If a high school or college, however, makes the suggestions offered any more than a definition of areas, the situation can become tragic. Unenlightened authorities sometimes attempt to determine exact subject matter in detail, and, worse still, the very order in which this subject matter should be taught. Sometimes even the timing of each subsection is enforced. This overbearing and ignorant practice, which assumes, often incorrectly, that the senior teacher is better than the junior, removes the heart from teaching and makes it dead. For pupil growth and sound method depend on rewriting the assigned curriculum in terms of pupil maturity, and in optimum order and timing. Only in this way can teaching become vital. The tyranny of a forced curriculum undoes the teacher's work before it is begun. The excuse for it is usually a joint examination, held under the pretense that learning can be controlled and made fixed. This chicanery brings class teachers under the domination of the system of marks, credits, or records locally in favor. These records are meant to serve teaching, not to destroy it. While in some cases they have a place, they must be kept in that place, so that they will be assets rather than liabilities. Probably the greatest sinner in the misuse of marks and examinations has been the high school. Under the proud but false belief that it is a little college, the high school has succumbed to pressure from the colleges. It has imitated the methods of the college and knuckled under to the demands of college authorities. This paralyzing effect of college domination on the life of the high school will

probably not pass away until college authorities become sufficiently enlightened to accept high school graduates simply on graduation. The proper relation between college and high school is not dictation from above, but consultative cooperation in the establishment of standards as they relate to the various types of college work.

College Teachers Hold the Same Basic Values as All Other Teachers

This is an appropriate place to leave the general argument long enough to meet the criticism of college teachers who might resent, in mild fashion, what is written here. College teachers often regard themselves as especially capable teachers, and in some senses this is true. Certainly advanced cultural development is necessary in teachers whose pupils are culturally advanced. It would be natural if such teachers were irked by some of the proposals made here, feeling that they were only for inferior persons and not for them. But this is not so. In the basic matters of teaching they are, like all teachers, high or low, faced with something deeper than caprice, opinion, or some doctrinaire notion of a method of teaching. The criterion is universal law, which prevails in human affairs just as truly as it does in the remainder of the natural world. No teacher is immune from this law any more than he is immune from the necessity of good teaching and good living. This universal law is not mechanical. So it is not possible to lay down any exactly detailed law of teaching. Yet there is a large area of commonly held ground in which what is true for one teacher is true for all. There are elements which are common to all teaching, matters universally applicable. It is these which are here referred to, as an attempt is made to present them and apply them to all teaching.

The college teacher, just because he has not traditionally followed the true course of learning and teaching, is now not more but rather less free than others. It is the college

teacher who, for generations, has most failed to conform to the sound proposals made by the greatest teachers. Even though the exposition made here is far from perfect, none should draw back because of pique. For the commonest fault of all teachers is excusing themselves from changes of which they themselves approve, but which inertia prevents them from making.

To resume the theme of the available written curriculum, it should be noticed that in periods of transition or reform, which take place periodically, teachers are often left without any effective written curriculum. In such cases it is more than ordinarily necessary for the teacher to write a proposed curriculum. Before doing this teachers should collect whatever suggestions they can from suitable written curriculums and from other teachers. Study of whatever is available need in no way hamper a teacher in writing down a major and its subsidiary objectives. Since it is the teacher's duty to veto as well as to accept curriculum elements, original teachers are not hampered if they have knowledge of what others have done. It is a weakness of the young, or of the emotionally unstable, to think that originality is helped by ignorance and hindered by knowledge. The true radical is not in revolt against something which he does not know about, but against a positive program which he rejects.

What Are the Obstacles to Be Overcome in Writing a Personal Curriculum?

The complexities of writing a personal forecast of curriculum are tremendous. For the personal value one brings to the process of curriculum rewriting involves not merely area, but subject and content. One must also consider method and timing. Whatever suggestions one starts with must first be recast in terms of method, if the pupils are to be enlisted in their own learning. It is failure to face this reality which causes teachers to be subject-matter teachers,

who do not know how to teach, but whose crude attempts at teaching are guided by the logic of the content they know.

How Can a Written Curriculum Forecast Be Made into a List of Things to Do?

Before a teacher is ready to teach, he must cast his curriculum into a list of things for his pupils to do. Such a list is seldom made. Most teachers fall short of it by doing nothing more than preparing a list of subject-matter areas to be covered, such as the freeing of the slaves, or sines and co-sines. Others list information and facts. Such teachers emerge with a list of subject headings, a pack of cards, which enables them to begin with number one and teach through to the last card in time for the last class meeting. To get away from this use of curriculum, without the corresponding use of good method, it is necessary to make a list of doings. This list outlines what pupils might reasonably do which will result in the learnings suggested by the curriculum, and in addition many other learnings which are implied in good living.

What Is the Form of a Good Curriculum Element?

Examples of desirable curriculum elements may make clear the form in which a useful curriculum may be written. The initial approach to this problem is possibly the use of a device, rather than a set of principles. Thus principles will emerge later on without delaying action. One simple device is to see that the main elements of the work are expressed in questions rather than in statements. Thus a teacher of health will not write, "How digestion takes place," but will write, "What shall I do to make sure that the food I eat is properly digested?" A teacher of arithmetic will not write, "Multiplication, addition, and subtraction as for the grade," but will write, "How can I (the pupil) keep track of my money so as to conserve my personal and my family's in-

come?" The list of a teacher of creative writing will not read, "How to write poetry?" but will read, "Does every one of us make up poetry at one time or another?"

After questions have been raised in this fashion, they can be followed through with an actual exploration of the real state of affairs in this respect. If the class keeps a record of its discoveries, and decides what the pupils think should be done about it, then a natural program will be developed and carried out.

Another device is to put each element in the form of a master question, personalized in form when possible. This leads directly to the discussion of real value. Such a discussion may be developed into any degree of activity which the teacher has the skill to direct. So the class which faces the question, "What shall I do to make sure that the food I eat is well digested?" may follow up (1) by orderly lectures or motion pictures on each aspect of digestion, or (2) by having each individual prepare careful diagrams and oral reports, to be supplemented by guidance from the teacher, or (3) by preparing a regime to follow out of school for two weeks, with a concluding report on each individual success, or (4) by planning an ideal menu and having a class luncheon, studying digestion before and after, in relation to the real problems involved.

Thus a teacher can follow up the question form simply or in a complex set of activities, as suits the situation. No matter what method he uses as follow-up, it is bound to be better than a mere elaboration of the subject-matter statement of curriculum commonly used.

But by far the most satisfactory device to use, in writing out an element of the curriculum, is to be sure that it involves in some way the ending *-ing*. This is so because this type of statement automatically throws the element into a form in which it can actively appear in class. For example, in the case of an element involving learning how to write a letter, the listing "correct form for a letter" is not enough.

It expresses the goal the teacher hopes to have the pupil reach, but it gives no guidance as to a satisfactory method of reaching it. This shortcoming does not exist if, instead, "Writing a letter to a friend" is written. So written it will make clear that, at an appropriate time in the term, each pupil will write, in class, a real letter, one which fits into the larger life pattern of the individual in an obvious way. So, just as a sixth grade returns from summer holidays, the subject of letters to summer friends naturally comes up. Time for writing the needed letters can be set aside in the part of the program usually allotted to language activities. After the first draft of the letter has been written, before it is corrected for spelling and punctuation, certain aspects of a good letter may be taken up. What more desirable than a brief teacher-directed lesson on good manners, that is to say *good form*, in writing, addressing, and stamping a letter. This total process was simply indicated by the well-written curriculum element, "Writing a letter to a friend."

This *-ing* ending has wider application than may, at first, be realized from the consideration of such an obvious example as "writing a letter to a friend." A teacher of sociology might find himself writing in such a goal as "making a survey of county and municipal services to the individual, with directions for taking advantage of those services." Such a survey, if mimeographed or printed and sold, would doubtless pay for itself. Thus a learning activity which would bring wide acquaintance with social theory and practice would yield value in both learning and living.

A college teacher of mathematics might write, "Taking the class to visit a nearby bridge or building under construction, and arranging a report from the engineer on the main mathematical problems involved in construction."

A college teacher of English might write, "Making an anthology of the best poems of the year, and comparing the new poems with those of a standard anthology."

A suitable element for a high school teacher of science

might be "discovering whether our community is harming or improving the biological patterns of the neighborhood."

A music teacher and an art teacher who decide to co-operate might agree on such a goal as "holding an art exhibit, supported by a musical program."

The subject of history suggests such an activity as "making an asset of history in projecting local and national development."

While such forms of curriculum are not common on college and high school levels, the modern elementary school already lends itself to this type of curriculum to perfection. Such goals in common use are "holding a Thanksgiving luncheon," "finding how much I am costing my parents," "finding out the bearing of my weight and height on my health," "growing beans to study root, stem, and leaf growth."

Whole written curriculums which approach this plan are already available for the elementary school. But even so, each individual teacher should rewrite a personal curriculum for his class, starting with whatever aids he can secure. Thus what the teacher actually uses as a basis for his teaching will be adapted to the genuine immediate circumstances of personality and community events. What further adaptations are needed are a matter of method, and can be made later on.

How Can the Teacher Classify the Elements in a Written Curriculum?

Teaching did not pass out of the amateur and haphazard stage without a revolution. One of the pioneers of that revolution was Caroline Platt, who founded the City and Country School in New York City's Greenwich Village early in the twentieth century. She relates the way in which an initial period of vitality and enthusiasm came to teachers who were freed from the strait jacket of customary teaching methods. This was soon followed by a groping for some simple analysis. By the simple process of classifying the

things the children were busy at, much as one could classify carrots, potatoes, and cabbages into bins, four practical groups of things were discovered. Miss Platt's curriculum chart included (1) play experiences, such as block building, art, and dramatic play, (2) practical experiences, such as shop work and cooking, (3) skills or techniques, such as number work and language, and (4) enrichment experiences, which included organization and information by means of trips, discussions, and the use of books and stories. This practical plan worked like tonic, and made it clear that while the concepts used by a skillful teacher are not the same as those used by the hack, yet concepts are needed in a work as complex as teaching.

The problem of curriculum boundaries is relatively simple for teachers in a university or in a secondary school, as such schools are usually organized. This is because these teachers work in a sharply delimited area. The elementary school teacher, however, administers a curriculum which involves not a single subject area, but the whole general field of experience. It is therefore necessary to use some system of checking and classification.

The old system is already gone from the elementary school. It was that of subjects like history, geography, and so on. This system hangs on past its day in many higher schools, though the trend even there is away from it. A practical substitute for it is needed, so that the total curriculum will not be just a long list of unclassified elements. This is in spite of the fact that something might be said for such an unclassified list, each element written on a separate filing card in which the elements are rearrangeable in terms of a suggestive sequence, or in terms of a teacher-pupil planned activity. Or after the class had planned for such an activity as "presenting a pageant of dolls in the costumes of other lands" the goal cards could be shuffled, and those appropriate could be grouped functionally. Such a reshuffling plan may be used with equal value in high school or college teaching.

Practical considerations suggest the listing of all the elements of the curriculum under four headings.

1. The arts
2. The skills
3. The sciences
4. The socialized behaviors

This classification recommends itself, first, because almost anything that an individual or a group does may be quickly seen to fall under one of these heads or a combination of them, and second, because the general conditions of mood and character which govern each of these types of activity are different and have a different governing effect on the teaching situation.

1. The mood which dominates in the case of the arts is the creative mood, in which personal freedom and original form prevail. They include writing poetry or stories, composing music, or making original designs in clay, wood, or any other medium.

2. The mood which prevails in the mastery of skills is, on the contrary, one of restraint. The pattern is not determined by the learner, but is predetermined by social custom. Skills are specialized abilities developed for special purposes and situations in which individuals work in co-operation with others. They include ability to compute, to read and spell, to sew, and to operate complex devices like a slide rule or complex machines like a typewriter. It is the area of work and of the use of tools and machines.

3. The word *science*, being the equivalent of the word *knowledge*, is the area of curiosity, of discovery, of the wish to learn what all things are like and how they work. It involves eagerness, struggle, search, study, and the thrill of recognition and invention. The sciences include the areas of knowledge and investigation, based on evidence and testimony, and the provision of new evidence and testimony. Thus a sequence of scientific thought is developed on a base of established natural data and controlled experiment.

A philosophical outlook comes from the consideration of value as codified in some formulation like the Ten Commandments, which are based on testimony or recast and revalued in terms of some such principle as that which states that the law should be written in the heart. This area includes the simple investigations and observation of childhood and stretches forward through life to magnificent discoveries, lofty treatises, and sublime meditation.

4. The socialized behaviors are those actions which are concerned with good living in a group. If one doing woodwork has a saw of his own he may cut with it when he likes. But when the saw is for the use of a group, one must learn to wait his turn. If one is giving a monologue he can speak when he likes. But if he is a character in a play he must know his lines in time for rehearsal. All matters which make for better group living—matters of procedure in discussion, matters of government, matters of social organization and executive responsibility—do not come naturally, but all must be learned.

A somewhat different and more basic type of classification is that of cyclical grouping. This may be used for a whole school or for a single classroom. It is too complex for description here, but its structure and a curriculum for the elementary school based on its organization has been described in full elsewhere.¹ The basis of this classification consists of ten modes of human behavior or action. These are:

Growing	Socializing
Homemaking	Thinking
Producing	Teaching
Technifying	Energizing
Communicating	Originating

It is conceivable that a school, or even a single class, might be organized to use these areas as a substitute for the old school subjects. The inevitable overlapping would prevent the rigidity of the old subject-matter organization. However, this suggestion is too radical to find wide acceptance. Theory is too drastic a medicine to be taken undiluted. It does give guidance to desirable change, however, and sets up a directional movement in practice which results in gradual improvement in the right direction.

Chapter 4

FORECASTING THE CLASS PROGRAM

Once there is a complete, written curriculum, the teacher-producer has the theme for the "play." But the timing is no such simple matter as it is in the theater. It is far more intricate than the familiar three acts, with two intermissions, set between 8 and 11 P.M. This play is term long, and it must be intricately staged in terms of human rhythms, daily and weekly periods, seasonal changes, and short and long holidays.

Seasonal weather changes are one of the factors which govern careful teaching in college, high school, and elementary school. To the sedentary class, taught in primitive fashion, the seasons make little difference. But when contacts with the outer world are maintained, a class must reckon with the climate. In the fall, nature trips must be taken, in many climates, early in the term. Indoor trips to offices, factories, community centers, and museums may be deferred to mid-term or later. In the spring term, this order is reversed, and outdoor activities are thrust into the last days of the term. Community dance programs, theatrical performances, and symphony concerts make rude incursions into the program when they will, for the community has a season of its own, to which the school must conform.

Long and short holidays affect school terms differently. The crude teacher pays little attention to them, but plows through his lessons, regarding holidays as little more than undesirable interruptions. Sometimes a teacher tries to make up for badly planned activity by allowing students neglectfully to pile up their assigned work. This may be

avoided by setting up short-period goals so that activities and studies, in order to be satisfactory, must be completed at the predetermined goal periods. Pupils may be protected from loss of holidays given them by the school system for emotional and physical recovery, if teachers exercise proper consideration. They may do so by calling for completed work and term papers just before holiday periods, and making no new assignments for a week before any given holiday.

Clumsy teachers ignore the human rhythms which affect the energy drives of both pupils and teacher. There is a typical surge of energy which comes with the beginning of a new term and just following a long free holiday. Teachers should always take advantage of this by seizing the opportunity that pupils' special readiness provides to help them harness their powers in behalf of learning. The rise and fall of energies in both teacher and pupils is affected by the weather, by events within the school and in the community, and by many obscure factors. Careful teachers attempt to avoid conflict with a current that is running against activity, and to make use of the added impetus which comes when the tide is running in a favorable direction. On the other hand, there is no reason why a teacher should not encourage students to brush away the various insignificant diversions which work against concentration and devotion to work under way. Inspiring and worth-while tasks so challenge the energies of students that what they are doing seems paramount, and they forgo less worth-while things to accomplish that on which they have set their hearts. Students who never rise to this kind of devotion never serve themselves or others well.

A Flexible Time Calendar

One of the devices that every teacher needs is a flexible time calendar. Without such a calendar, teaching must be crude, and the refinements and subtleties of a first-class pro-

gram cannot be secured. Many devices are used by teachers for timing, since circumstances vary widely. One of the simplest and most universally necessary is a calendar of dates. Such a calendar functions in much the same way, no matter on what level the teacher is working, so that a single example may be enough to cover all cases. A college class in the method of teaching art, music, and science was guided through a term by the following calendar, which was posted on oak tag and kept hanging in the classroom, where it could be consulted by all concerned.

CLASS IN METHOD OF TEACHING
ART, MUSIC, AND SCIENCE

(Each Period Three Hours—1-4 P.M.)

TERM CALENDAR

February

- Tuesday 7: Delineation of area
Thursday 9: Organization of class
Tuesday 14: Organized class at work. song series, music series, and science series begin
Tuesday 21
Thursday 23: Trip to science museum
Tuesday 28

March

- Thursday 2: Moving-picture program A in projection room
Tuesday 7: Lantern-slide lecture on the technique of teaching
Thursday 9
Tuesday 14: Science series ends
Thursday 16: Moving-picture program B
Tuesday 21

Thursday 23: Music series ends

Tuesday 28

Thursday 30: Moving-picture program C

April

Tuesday 4: Song series ends

Thursday 6: Trip to Frick Museum and the Museum of
Non-Objective Art

(April 7 to 16: Spring vacation)

Tuesday 18: Art program begins

Thursday 20

Tuesday 25: Special individual health reports due

Thursday 21: Second goal period: testing and accounting

May

Tuesday 2

Thursday 4: Charter Day: class as usual

Tuesday 9: Reading of class history

Thursday 11: Trip to botanical garden

Tuesday 16: Check list due

Thursday 18: Written term evaluation due

Tuesday 23: Completion of work and cleanup

Thursday 25: End of third goal period: final testing and
accounting

A teacher who has taught through a term according to such a calendar may make a record of certain undated incidents which may serve as a reminder of action to be taken in a succeeding term. No term will develop in exactly the same way as any other. On the other hand, these very variations tend to make the teacher overlook important teaching essentials just because there are so many of them. In a developmental sequence there is a certain orderliness in which growth gains appear and require attention. The calendar given above may be well supported if the teacher has such an experience record as the following:

CLASS IN METHOD OF TEACHING
ART, MUSIC, AND SCIENCE
IN ELEMENTARY SCHOOL

APPROXIMATE ORDER OF
SUPPORTING TEACHER ACTIVITIES

The teacher may use this list as a reminder of things which he may find it necessary to do:

1. Provide mimeographed description and details of term's program.
2. Give out mimeographed history of the class of the previous term, as written by the historian of that class.
3. Have colored pictures of shells and examples of children's art work posted on vacant bulletin boards.
4. Organize plans for use of textbooks and library reference.
5. Organize the class according to pupil choice of activities.
6. Launch program of chart and bulletin-board work. Develop standards for charts and for bulletins.
7. Arrange for class to select and appoint what committees they need. Launch work of committees.
8. Arrange detailed moving-picture program for the term with the projection department.
9. Take class on special visit to the education library to study the available materials there.
10. Secure names, addresses, and phone numbers of class members. Have list mimeographed and distributed.
11. Arrange organization of music-, song-, and science-teaching series, in staggered sequence.
12. Arrange with class librarian for setting up classroom library.
13. Plan and modify trip program in terms of temporary special opportunities.
14. Increase speed of the science and music series.

15. Establish plans for individual song repertoires.

16. Deliver three special lectures, on successive days, on the teaching of science, music, and art. Follow with discussion periods when needed.

17. Inquire if class wishes to hold a class luncheon in class. If so, have date set and ensure sound value outcomes.

18. Distribute musical-talent survey sheets, and arrange for tabulation of results and their use.

19. Explore the class to discover if they wish to develop a crosscutting activity, and if so have a committee appointed to advance the matter.

20. Secure "Fun with Paper" and "Fun with String" from the library and launch paper-folding and string work.

21. Announce plans for the individual development of a needed health habit. Give out mimeographed materials on childhood diseases.

22. End of first goal period.

1. Launch health program.

2. Survey required reading for second third of the term.

3. Complete science program.

4. Deliver lecture, with mimeographed notes, on child voices and children's singing.

5. Plan remainder of term together with class, clarifying the crosscutting activity or a program substitute.

6. Post a copy of the record sheet and check list, and explain requirement involved.

7. Conclude song and music series.

8. Arrange for beginning of construction with waste materials.

9. Give illustrated lecture on childhood-disease symptoms.

10. End of second goal period.

1. Provide mimeographed directions for art program and use of various mediums.

2. Arrange trip to the library and classroom survey of library materials for remainder of term.

3. Launch full art program. Clay, linoleum blocks, poster paints, water color, finger painting, and incidental mediums. (N.B. No new activities should be initiated after this time, unless previously planned.)

4. Lecture on method of teaching, with mimeographed sheet on comparative method.

5. Give lecture with mimeographed notes on comparison of method used in this class with adaptation of the same method to elementary school classes.

6. Make order for materials needed for next term.

7. Give out mimeographed "Where to Find It," and discuss.

8. Conclude crosscutting activity in whatever way is appropriate.

9. Have class history read aloud.

10. Collect record sheets, check sheets, and written evaluations.

11. Materials checkup, library checkup, cleanup.

12. Final accounting, end of third goal period and of term.

The use of an outline is a substitute for such an all-out program of activities as that described above. This is a common device in many carefully taught high school and college classes. Such an outline lists topics and areas in sequence, but indicates no special activities. It is presumed that these will be left to the class and will be the result of teacher-pupil planning. Such activities may include lectures, discussions, the panel, the extraclass trip, picture study, bulletin-board news, class reports, term papers, and dramatized presentations of some curriculum high lights.

The cases given are mere examples, from which individual teachers will vary widely. Nevertheless, all college and high school teachers need a flexible calendar of some sort. It can be modified from the above but in minimal form it should include a listing of the number of periods the class meets, and the approximate timing of what goes on, so ar-

ranged as to ensure the completion of whatever is undertaken. Needless to say, such a forecast requires continual revision during the process of teaching. The timing of goals may be moved forward or backward, shortened or lengthened, goals may be altered or even sometimes omitted to make way for some valuable trip or some exciting visitor. But in the end all should be rounded off in such a way that the learning is a complete whole. So no teacher will commit the sin of "not finishing," a common vice.

The Weekly Program

A weekly program is needed by an elementary school teacher. This may be kept in timetable form or, preferably, in a notebook, so that daily planning can continue through the book, automatically providing a record of the term's work. This may be used for future reference, for writing any accounts of the work that may be required for official use, or for publication. In addition, it can aid in remodeling similar work for future terms.

Because of the desirability of a simple routine which can give security to small children, the daily program for the lower grades is usually the same for each day of the week. Here is an example of such a program:

GRADE 1

9:00	Work period
9:50	Recess (toilet, milk)
10:00	Rhythms—music
10:40	Outdoors—yard
11:10	Discussion
11:30	Park—work—games
2:30	Stories

In the upper grades, the weekly program is much more complex. The following is an excellent example from a fourth grade.¹

¹ Courtesy of Miss Mabel Richards.

SPECIAL PROGRAMING

Assemblies

Wednesday 10:30–11:30 To Mrs. G for special help
 (George and Jean 9:30–10:00)
 (Ronnie and Richard 10:00)

Library hours

Public library (To be arranged)
 Elementary library Friday 2:00

Grade chairmen

Mrs. _____ Telephone _____
 Mrs. _____ Telephone _____

Faculty conference hours

Thursday 3:00–4:00

Special teachers

Music

Special and request period Every morning 8:30–9:00
 Music conference hour Thursday 3:00–4:00
 Third- and fourth grade sing Tuesday 11:00–11:30

Shop

On-call period—Monday,
 Tuesday, Thursday,
 Friday Shop every day
 Evening workshop Wednesday 7:30 10:00
 Teachers conference hour Thursday 3:00–4:00

Physical education

(rainy days)

Monday 9:20–9:45 Big gym
 Thursday 9:20–9:45 Girls' playroom
 Friday 9:20–9:45 Big gym

CLASS SCHEDULE

Monday

Class meeting (plans, reports, class jobs, attendance, announcements, banking, etc.)	8:45-9:20
Physical education	9:20-9:45
Shop, art, classroom, open workshop	9:45-10:30
Arithmetic	
Spelling	
Story time	11:40
Lunchtime	11:40-1:00
Library time—classroom or elementary library	1:30
Social studies	
Physical education	2:15-2:35
Stories, poems, or plays	
Check next day's plans	2:35-3:00

Tuesday

Class meeting	8:45-9:20
Physical education	9:20-9:45
Shop, art, classroom, open workshop	9:45-10:30
Science	10:30-11:30
(can alternate at 11:00 with third- and fourth-grade sing)	
Lunchtime	11:40-1:00
Music	1:05
Arithmetic	
Spelling	
Library time	3:00

Wednesday

Class meeting	
Rhythms (children put on sneakers as they arrive)	9:20-9:45
Shop, art, classroom, open workshop	9:45-10:30

Assembly	10:30-11:30
Story or discussion time	11:40
Lunchtime	11:40-1:00
Arithmetic	
Spelling	
Social studies	
Library time	3:00

Thursday

Class meeting	
Physical education	9:20-9:45
Shop, art, classroom, open workshop	9:45-10:30
Arithmetic	
Spelling	
Story time	
Lunchtime	11:40-1:00
Library time	
Social studies	
Physical education	2:15-2:55
Stories, poems, plays, plans	3:00

Friday

Class meeting	8:45-9:20
Physical education	9:20-9:45
Shop, art, classroom, open workshop	9:45-10:30
Arithmetic	
Music	11:00-11:30
Story time	11:40-1:00
Library time	
Spelling	
Physical education	2:15-2:55

Alternate Fridays (beginning
Sept. 12)

Social studies

The Daily Program

As children pass from the earliest to the higher grades, variations in their program increase, so that a whole week of daily programs is needed. Teachers who tend to drift, from day to day, without such a steadying daily guide, overlook the fact that children require security and certainty in the background of a changing program. Such a steadying influence contributes much to the good behavior of a group. The weekly plan, including day-to-day changes, serves the teacher as a base from which to work out each fresh day's program.

The following examples reflect the language of the school in which they were written. Every school has its customary language, so that the individual teacher will modify what is set down in terms of personal and local fashions. Such schemes as the following are merely suggestive.

SAMPLE SECOND-GRADE PROGRAM

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8 45 9 30	Work Period (With open shop, studio music every day)				
9 45	Science	Check and plan for the following day			
10 00		Rhythms	Physical Education		
10 15	Lunch Music, Stories	Lunch Music Stories	(In pleasant weather) Play court		
10 30			Lunch music stories		
10 50	(In pleasant weather) Play court		Language Arts (every day)		Music
11 15					
12 30	Reading Writing Numbers (every day)				
1 45 3 00	Reading Writing Numbers (every day)				

SAMPLE FOURTH-GRADE PROGRAM

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:45	Class Meeting (planning, poems, clippings, announcements, reports, banking)				Student Council Red Cross
9:20	Arithmetic (usually oral or board work with groups)				
9:45	Physical Education		Rhythms	Physical Education	
10:30	Choice Work Period (art, shop, library, classroom, arithmetic, spelling for individuals who need special help)				
11:00	Arithmetic Spelling	Chores Singing time for group	Assembly, spelling, or social studies	Arithmetic Spelling	Music

AFTERNOON SESSION

1:00	Reading time ($\frac{1}{2}$ hr usually) Social studies work Posture Work period for individual needs (story writing, letters, etc.)	Music Arithmetic Gym Reading time	Arithmetic Science Reading time Student Council for two children	Reading time for weekly reader discussion time (story, letter, or report writing, plays, etc.)	Reading time Arithmetic Gym Social studies Library (school or public library)
3:00					

SAMPLE SIXTH-GRADE PROGRAM

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8 45	Class Meeting (news of the day, plans, etc)				
9 00	English	Rhythms Social studies	English	Activities	
10 00	Social studies	Social studies	Social studies	Arithmetic	Social studies
11 00		Current events			
11 05 11 45	Gym (every day)				

AFTERNOON SESSION

1 00	Arithmetic	Science	Rhythms	Art	Arithmetic
2 00	Individual activities	Arithmetic	Choice period (art or shop)	Shop	Music
2 30 3 00	Special gym	Music	5th and 6th grade sing		Arithmetic

The Daily Rewrite of the Daily Program

The average daily program must be adapted to the special circumstances that come with every new day by being rewritten for that particular day. In the lower grades, this may be a simple and informal matter. After some weeks the children learn the daily sequence of activities from experience. When this has occurred, a notation in front of the room on the blackboard carries information on the special events of the day. This helps to guide the class, and is usually referred to in the morning conference between the children and the teacher. It stands as an interesting and significant invitation to learn to read. Such a notation is the following:

TUESDAY, NOVEMBER 8

At 10:15 the science teacher will show us a film about geysers.

At 11:00, Evelyn, from the third grade, will come in to read us a story.

At 11:05 some of us have rhythms. Others have rhythms at 1:55.

Did the girls who volunteered to write to Miss M do so?

For the middle and upper grades, the rewriting of the daily program becomes a more complex task. After the experience of a given day, the teacher is prepared to plan the work of the following day. Teachers who wish to emphasize joint teacher-pupil planning may use the last minutes of the day to secure the children's assistance. Or they may make a plan and discuss any desirable changes in the morning conference of the following day. Middle- and upper-grade programs are too complex to be planned by pupils alone, and such pupils are too immature to open up the whole day's plan each morning, using large amounts of time in discussion which soon becomes monotonous. Teachers who carry out elaborate programs of pupil-teacher planning, on matters which require adult powers of organization and

logical grasp, actually delude themselves and use subterfuge to cover up the fact that the basic planning is their own. Better to face the fact frankly that the reason why children have a teacher is that the teacher has superior mental grasp and advanced ability.

As the teacher plans the new day, consideration is given to the changes which have come into the program through the fresh activities of the week and of the previous day. In this way the teacher incorporates the result of pupil-teacher planning. Some teachers like to make their plan before leaving school in the afternoon, while the day's experiences are still fresh in their memory. Others prefer to do it during a planning period, in the evening. Still others do it just before the beginning of class in the morning. Whenever it is done, the work becomes the basis of the next part of the program. It appears in the teacher's notes first, and is then transferred to the blackboard before the class begins. Thus it gives automatic guidance to the class throughout the day. Approximate timing may be entered, or not, as suits teacher and class. The sophisticated supervisor no longer expects to find a class at work according to the pretiming of an arbitrary schedule. Yet it is reasonable to find the class related, in some sensible fashion, to the day's program, as any class is bound to be unless no such program exists.

The following series of daily programs, copied from the blackboard as they appeared day to day in the fourth-grade class of Miss Mabel Richards, gives a clear notion of the way in which such programs keep track of a developing teaching situation. The first group is taken from the term beginning, the last group at term ending.

Tuesday, September 30

Class meeting (choose curtain designs)

Arithmetic

Gym: 9:20

Shop, art, or library

Science: 10:30-11:30

Music: 1:05

Spelling

Social studies

Reading

MEMO

1. Choose curtain designs

2. Decide date for parents' meeting

3. Robert B—special spelling program

4. Make music books

Thursday, October 2

Class meeting

Moving pictures and slides: 8:45 (*The Congo*)

Gym: 9:30

Shop, art, or library

Complete curtains

Arithmetic

Spelling

Reading

Social studies (finish "The Sky Above Us")

Share-and-tell period

Send application slips for orchestra

The ending of a term is pictured in the following daily programs which appeared day by day on the blackboard:

Wednesday, June 16

Finish work folders

Gym: 9:20 (if sunny)

Reading

Program arrangements for play

Check large folders—Karen, Raye, Sallie, Derry, Eleanor,
John B

Take down music cupboard

Put away blocks

Make work folders—Tony, Eleanor

Thursday, June 17

Finish work folders

Gym: 9:20

Work on our play

Work on work folders

Make title pages—Linda, Tony, Alice, Michael

Put away large blocks

Arrange flowers, chairs

Friday, June 18

Reading time

Check our play, *The Tar Baby*

Get ready for parents to see our play at 2 P.M. today

Check: costumes, stage, invitations, properties

Gym: 9:20

Assembly: 10:15

Music: 11:00

Afternoon: finishing touches—chairs, tables, work folders set out

Play

Story time

Monday, June 21 (the first day of summer)

Complete work folders—Jane, Eddy, Derry, Alice

Gym: 9:20

Science surprise: 10:30

Reading (check books)

Class meeting (plan picnic)

Arithmetic

Spelling test

The college teacher and the high school teacher are both in more serious need of a daily program than other teachers, because there can be no weekly program. Each day must be a developmental unit, in which the growth of the individual and of the group is carried forward on a higher level. Subject-matter teaching has been rejected by good teachers

just because it makes only sequential, or logical, progress, and so presents merely the illusion of gain. Developmental teaching is supported by the use of a notebook, or a filing card, on which the teacher makes notations at the end of a teaching period. The remodeling of these program notes at the beginning of a new period is of tremendous help in guiding the class toward developing objectives. This is so whether these objectives are entirely teacher-planned or are the outcome of joint work of class and teacher. The only substitute for these notes, in developmental teaching, is the memory of the teacher, and no teacher remembers so well as the written words remember for him.

This daily program should be written on the blackboard at the beginning of a period, either by a class program secretary, who volunteers for this work, or by the teacher. Thus a teacher of English might have the notes made at the end of the previous period transferred, in revised form, to the blackboard thus:

1. Class secretary's summary of individual students' listings of the most interesting book read in the last six months.
2. Richard's illustrations of the types of spears and lances used in tournaments.
3. Reading, by the teacher, of the description of a tournament in "Ivanhoe."
4. Committee report on current activity of the class in its new anthology of current poetry.

If it should turn out that Richard was not ready with his report, for some valid reason, it might be deferred to the following period. This would give more time for the development of the work on the anthology. By such a program the class is given a sense of progress and a feeling of security. This results from the fact that the teacher is not the be-all of the class, and because it is clear that this class is not drifting. When, at the end of the period, it becomes evident that the work set out has been completed, the class

realizes that it is really accomplishing its objectives. If some goals must be deferred, the fact that they are not forgotten when the class reconvenes makes the class realize that its progress is certain, orderly, and thorough.

Nevertheless, such careful programing and planning must be protected from rigidity or inflexibility which might set in. The very fact that things are planned, and thought out, tends to make them seem mandatory. But in good teaching, the current experiences of the human beings involved are always a prime factor in method. The life of every person present has specificity. The quality and texture of everyone's life of the moment is the key to learning and teaching.

Therefore, new suggestions, new plans, or fortuitous happenings continually demand retiming and replanning. The teacher must constantly judge what can be added and what can be dropped, without injury to the main stream of progress and the reaching of major objectives. Thus, if a Shakespearean actor who happened to be visiting the school could be persuaded to spend ten minutes or more with the class, all else could profitably be laid aside. A sudden interest in spring poetry, stimulated by the season, would warrant a special search by the pupils and the setting aside of a special day for a literary festival of spring.

Thus programs must be constantly modified, without being upset. Special events soon pass, and the planned program is resumed. The above examples are taken from the field of literature, but they might be found in exactly the same terms in any area, and on high school or college level, where content and action is scaled to the development of the pupils. For the techniques of calendar, and timing of the program, are common to all teaching, and must be carefully attended to if teaching is to be orderly and effective.

Should an Imaginary Estimate of What Will Happen during the Term Be Made in Advance?

When the details of curriculum, calendar, and daily program have been set in order, is that all that is necessary? Or

should there be further preparation before the teacher actually meets the class? Probably a long-term, imaginary picture of what will happen should be in the teacher's thoughts. It may be written down into a term plan, or not, as the teacher prefers.

It is essential that this should *not* take the form of a summary of the subject matter to be taught. This error, fostered so long and so sedulously by authoritarian tenets, backed up by dictatorial administrative and examination systems, is the root error of the common variety of bad teaching.

On the other hand, it is true that subject matter is essential, fundamentally important, and a fortress of value. But its worth is undermined when its structure and form master the teaching process. For subject matter should not become a hindrance to its own use. Rather must teaching be so skillful that the learner lives in situations that make the subject matter deeply desirable and obviously worth working for. So the teacher's forecast of what will take place must not be in terms of subject matter, although the educated teacher will himself be a master of the subject matter, and know or write books in which it is set forth. Yet he will forecast the term's work in the form of activities, or things to be done.

Thus an elementary school teacher might think of a fifth-grade class in some such fashion as this:

We will begin by setting the class in action at a few essential tasks, such as program making, textbook and library surveys, improving the appearance of the room, following up the art and music patterns of the previous term. We will also follow up with group and individual patterns in spelling, reading, and arithmetic. A conference will be held in which the group will plan a picture of the desirable elements of the whole term, to be posted on a special term chart. This will involve the normal, customary standards in reading, spelling, writ-

ing, and measuring. In addition, it will involve some activities in art, music, science, social studies, and other areas. There will be trips to such places as the science museum, a museum with an exhibit of medieval and classical art, a bird sanctuary, a botanical garden. Books and pictures on the Middle Ages will be made available. Each pupil may make a study of some such subject as medieval armor, tapestries, gardens, guilds. These studies will be given as illustrated reports, written and oral.

The actual forms of these activities will be the result of teacher-group planning in individual and group conference. The result will involve art, music, social studies, science, and language. Possibly some large unit of activity will result, as the writing and giving of a play. A suitable theme for this might be the life of a boy and girl today compared with the life of a boy and girl of the same age in the Middle Ages, the aim of which is to leave the audience with the question, "Which do you choose?" On the other hand, class activities may result in the choice of an entirely different theme, not related at all to the Middle Ages.

Incidental support to the program will be given by moving pictures and by special lessons, perhaps by invited guests. In the background will be a constant succession of special activities, which arise from the time, place, and current events. Such might be a Red Cross drive, a visitor from India, or a spring picnic.

The forecast for a secondary school teacher, responsible for only a part of the direction of his pupils, will, nevertheless, be built up in a similar way. So a science teacher might think of an approaching term in this way:

An initial program may be set in operation by making use of the students' outdoor summer experiences. Construction of a huge wall map, on strong paper, on

which each pupil marks his summer locale, could make a beginning. Studies of the land and water areas, in terms of local occupations such as fishing and lumbering, and of recreation, can give entry into natural and technological science situations.

As soon as possible, a hobby survey, in which each pupil's special interest is discovered, may be made. A mapping of individual interest into groupings can serve as a next step in planning a series of class reports in which pupils demonstrate the scientific involvements of their hobbies. Airplanes, inotors, butterfly collections, fossils, and stones can lead to a development of scientific consciousness. Readings will include basic area readings, in regular textbooks, and special readings needed to back up demonstrations and reports. Finally, an experimental approach to some personal problem or interest related to the science area can be planned for next term.

A college teacher of history of the nineteenth century might foresee his program as follows:

Each pupil may study the life of one of the great figures of that century, in various parts of the whole world, Occident and Orient. The earliest part of the term would involve readings, required to enable the pupils to select the individual to be studied. Reports of the major problems which these individuals faced could result in a remarkable delineation of the world scene, and point up the problems which the nineteenth century left to the twentieth.

In the last part of the term, the students might write a playlet, showing these world figures in an imaginary conference, in which they outlined their advice to the twentieth century. Thus would appear the problems which were passed on to the twentieth century as the legacy of history, and this would bring up the question

of what must be done to hold our gains and to make new progress. A series of moving-picture programs involving great men and important events could do much to keep the program alive.

The Teacher Is Now Ready to Meet the Class

Teachers who have provided themselves with a satisfactory curriculum, a calendar or program, and a forecast of the activities likely to develop, as well as a partial list of readings and study materials for the term, are ready to begin. They have done all that can profitably be done to prepare for the meeting of their students. They may now rest their case and wait for the arrival of the other individuals who will work for the staging of the drama.

Chapter 5

MEET THE PLAYERS

On a certain day, and at a certain hour, the teacher is suddenly confronted with the players in the drama which is the school. Whether the pupils are old or young, this should be an exciting day. This is what the teacher lives for—a group out of the millions of living beings on the face of the earth, a particular group entrusted to his care. These are not scholars, they are merely people. These are the actors; this is the cast. From the blending of these lives, the play must be made.

There is an eternal conflict between the older and the younger generations about the treatment of the young. The harmonious resolution of this conflict is beautifully portrayed by Santha Rama Rau, in her story of three generations in "Home to India." She tells of her return to India, at the age of sixteen, after having been educated in London, and of her gentle welcome by her grandmother, an orthodox Sarasvat Brahman. To the grandmother, a caste mark on the forehead was a religious duty, to the granddaughter, merely a customary cosmetic decoration. But because the grandmother carried on her religious and social customs without forcing compliance on her grandchildren, and because the grandchild fell into the unfamiliar ways of the household and carried on the family customs even though they had for her, lost their meaning, a happy and developing family was the result.

But the common conflict between the older and the younger generations should not mislead teachers into the

belief that there are two ways of directing their pupils, an old and a new, one of which produces superior results. For this leads them to believe that there is a choice, that they must listen to interminable arguments, weigh the two points of view carefully, and finally pick old or new, from then on dealing with their pupils according to this decision.

Teachers must realize that there is no good old way, which they are bound to discover and follow. The battery of customs and meaningless habits, the sway of too ancient thoughts, and the organized pressures of the *status quo* have reality but no standing. For teachers are of the new generation. They belong not with their own teachers, but with their pupils. In the nature of the case, they must side with the young.

For the new ways are not caprice. They are the result of changes in the economic, social, and cultural background, which take place as each generation passes into the next. The attitude of adult individuals toward the young has drastically changed in the last hundred years. The new attitude is not open to challenge, for it is the result of actual changes, which make the old attitude an unrealistic figment, and the new realization of the significance of human personality something actual, satisfactory, and mandatory. One must not cling blindly to the old and ignore the new which is here to stay. So one cannot ignore radio and television and say that books are better. We may have them all. Certainly the young will have their television and be changed by it, and as to acceptance or rejection of it, no older generation has any choice. The new is here, and the changes it brings must be reckoned with. So it is with the new status of the young.

This change in the accepted status of the young is well pointed up by the contrast brought to mind in reading an account of the tragic life of a lad who lived only a century ago. A leaflet in the London Museum relates the tale.

THE DREADFUL LIFE AND CONFESSION
OF A BOY AGED TWELVE YEARS

. . . Lastly his parents made him desert from his master, and bound him to a gang of thieves, who sent him down the chimney of a jeweller in Swallow Street, where he artfully unbolted the shop window, out of which his companions cut a pane of glass, and he handed a considerable quantity of articles to them; but the noise he made alarmed the family, and he was taken into custody, but the others escaped.

He was tried at the last Old Bailey Sessions, found guilty, and sentenced to die in the twelfth year of his age. After his sentence the confession he made struck those around with horror, stating the particulars of several murders and robberies.

We hope the dreadful example of this wretched youth may produce a lasting warning to the world at large.

It is obvious that times have changed since the days of this "wretched youth."

Today there is far more concern for the young than for their elders. We are sentimental about children, and we accept the view that no unhappiness, harm, or neglect should come their way. The community plans that they shall have food, clothing, shelter, medical care, and education. They are protected above all others, in war and peace. But let these same individuals pass into maturity, and they may be neglected in health and disease, exposed to all kinds of danger, and killed in war. The race has at last developed a conscience about children, and to this extent we have made good and real progress. We might almost say that we have learned, in the age-long pilgrimage of the race, to give human beings a good and proper start. But the standard of good life for adults has not yet been accepted as an essential of social life.

So far so good. It makes clear the fact that the attitude which we take toward young people is a basic determiner of what happens to them. Our attitude toward our pupils is basic. Everything else depends upon how we regard them. So the formulation of a good attitude is fundamental to good teaching.

Just what do we think of these pupils of ours, whom we meet for the first time in a new class? Are they friends or enemies? Are they a means to an end, or an end in themselves? Do we like them, or merely tolerate them? Is their immaturity a badge of inferiority, or merely a stage of growth? How do we approach them, with how great a realization of their worth?

Teachers cannot realize too clearly that the success of their teaching depends far less upon what they know, and what information they pass on, than upon the extent to which they realize the true worth of their pupils. It is the constant concern for the well-being of those who are being taught which is the true mark of the really good teacher.

So it is that good teaching is based on a full realization of students as people. They are not dehumanized during the special process of teaching, but they are wholly and fully alive. They should not suspend living while they are learning, but they should bring their whole life to the support of their learning, and learning should support and develop them into fuller living.

Consequently it is worth while to consider some of the characteristics of learners which should not be overlooked, if teachers are to secure the well-being of their charges.

Pupils Have the Qualities and Characteristics of All Other People

When we understand the common strengths and weaknesses of people, we begin to understand our pupils. For pupils react to situations the same as all other people. If they are frowned upon they frown, if smiled upon they smile back. They respond just as anyone else would respond

to similar treatment. Consequently, friendliness is of the utmost importance. Teachers should be approachable, sympathetic, considerate in all their dealings, and willing to give advice and help.

To hold such an attitude is not without its problems. It does not mean that teachers should exhibit a gushing sort of friendliness. This does not get a suitable response from young or old. In a teacher's beginning relationships with a class, a quiet reserve is most suitable. A gentle but firm assumption of the teacher's place as leader and director of the class is essential. Good manners, courtesy, and consideration must all be colored by dignity. The teacher must clearly and obviously make a stand as representative of the strength, stability, and significance of the school and of the community. There is no substitute for this early remoteness. It covers an initial period during which pupils are surveying the teacher, and teachers are beginning to know their pupils in their special abilities and personal characteristics. The teacher must be an authority without becoming authoritarian, a solid, steady person, allowing the fullest possible freedom but still standing as the assessor of disputed value, a final court of classroom appeal.

Failure to accept the dignity and authority of the position is a common pitfall of young teachers, eager to be friendly. On one occasion a young camp director, eager to be democratic and appear to be just one of the crowd, deliberately placed herself under the same rule as the youngsters. Announcing the fact that campers late for lunch would not get any, she added that the rule applied to herself also. It was not long before this camp director was delayed in showing a group of visiting parents through the grounds. As she returned with her guests for lunch, she was greeted by shouts of "no lunch! no lunch!" Her error was in placing herself on an equality with pupils in matters in which they were not equal.

To keep one's distance, in the beginning, while at the same time showing kindness and courtesy, is not more than

ordinary refinement in human relations. If students mingle with one another and with the teacher, in the course of their work, talking about their problems and activities, opportunities soon arise for more intimate forms of guidance. Pupils are glad of a chance to discuss their problems and ask for advice and help. Thus, without harming his dignity or leadership, a teacher may soon establish an excellent level of friendly familiarity.

Hitching Wagons to Stars

As a teacher gradually begins to know a pupil, it is possible to perform a double duty—discovering what a pupil yearns for and inspiring him to work for it. This applies not only to the grand goal of a lifetime, but also to those passing goals that obsess every alert pupil from day to day. Surely when Emerson urged, “Hitch your wagon to a star,” he struck deep at the will of every learner. For the essence of learning lies in desire. To set one’s heart on a thing, large or small, is to begin to walk the path of learning. Whether our goal is to get a sharp point on one’s pencil or to become a great engineer, the star pulls us forward with a miraculous magnetism.

The secret of teaching is to persuade learners to set a goal which seems thoroughly worth while. If learners decide to build a real house, or a play house, they can do it. If a single pupil decides to write and illustrate a story, he can do it. For the tremendous dynamic which is released when a human being commits himself to accomplish some earnestly desired result is the force, and the only force, that moves the world. The great aim and outcome of all education is to develop the habit of seeing the unborn good, and striving to bring it into being. As we come to know our pupils, their needs and desires, if we can persuade them to enlist their own energies in their own behalf, we have been tremendously successful. For the teacher does not provide his pupils with energy, he merely persuades them to call upon what they have themselves. Furthermore it seems as

if the great challenge causes energy itself to be born. The runner who pushes hard to win the great race gets a second breath. For the grand goal, there is the great energy. If we can make our pupils want something worth while, we can rely on them to work for it. All of teaching is merely to persuade a pupil to adopt a good goal and help him to reach it. Yet how few teachers do this, and how seldom.

Success Is the Great Tonic

Nothing succeeds in pleasing a learner like success. So a teacher must constantly see to it that his pupils are successful in all their undertakings. To pile distasteful and insignificant tasks upon pupils is to court ultimate failure. Pupils who are taught in this way develop a form of compliance which deceives both themselves and their teachers. The teachers are deceived because they believe that compliance means learning. The students are deceived because they content themselves with a substitute for learning. A false success is taken for a real one.

Teachers should continually stir their pupils to undertake tasks which the pupils themselves recognize as desirable and in which they can be successful. A slow-reading child will be obfuscated and discouraged if asked to read a book too hard for him, even if the book is of standard difficulty for a child of his age. This same child, if given an easier book, that he can read, will not only enjoy the book as he reads it but will complete it with that feeling of elation which comes with success. Often a college student will do an endless amount of work on a topic which he himself has suggested, while a teacher-suggested task leaves him cold. Teachers must enlist their pupils in tasks which are not too hard for completion, but which are yet so full of meaning and interest that they are a vital challenge. A teacher's only success is in the success of his pupils. It is not in some remote future, but here and now.

How deep in the hearts of human beings is this craving for success. How blighting and devastating are continued

failure and frustration. The delight of a child in some wagon he has made which actually goes, or the satisfaction of a college girl who has starred in a dance she has composed, knows no bounds. It is this deep delight that we strive for, because it builds up human beings into a realization of their own significance and value, and of the direction in which this value lies. Teachers of adults and of children must grasp how serious a thing it is to discourage a child or an adult by allowing him to spend time on tasks that end nowhere. We teachers are in duty bound to arrange a series of activities for our pupils which are their own, and in which they can come to that final joy of knowing that what they have done has been well done. Inertia or "laziness" finds a preventive and an antidote in success.

Recognition Follows Success

All human beings strive for recognition. Without it individuals can hardly live a normal life. Pupils, like all other people, thrive on recognition, and starve without it. It is not enough that a pupil does his work and reaches his objective. To scold or censure for shortcomings is purely negative. Every pupil who has done well should be told so. A word of expressed satisfaction or appreciation, for every task well completed, meets a human need.

There should also be a clearinghouse for whatever has been achieved. A story written should be read to others; a good poem should be read, or published, or both. A picture should be hung, if not in school, then at home, where there is more room. In the late elementary school it is not uncommon to find that children do not bother to take home their fired pottery animals, sometimes giving them to other pupils who want them. It will always be found that the home of such forlorn artists has no place for their works of art. In homes where these children's products hold their place among more mature forms in the family living room, children cherish their self-made cups and candlesticks. A play is often its own reward, since the audience makes a spon-

taneous response. Yet this is not enough, for the entire class waits to hear the teacher's "well done," to know that what was so much work and so much fun is also acceptable as learning.

Students as Potential Giants

One does not fully grasp his privilege and responsibility as a teacher until he realizes that among these pygmies of today are those who will be the giants of tomorrow. Teachers are continually underestimating pupils. The way of the world is to accept, and trust, only those whose ability and trustworthiness have been demonstrated and proved. When one applies for a position as a draftsman or an accountant, he must have his credentials and the support of other human beings in the form of testimonials. But the student's testimonials are racial. He comes with a guaranteed equipment in the form of fingers, feet, eyes, and intelligence. The teacher dares not accept him upon his reputation, either for good or for bad. He must be taken as he is, with no score for or against him. He must be taken on the assumption that he is good, capable, and honest. The teacher must think only the best of him, hope the best, expect the best. For even those whose previous ways have not been too good are facile at reform. Who knows but that the previous teacher and past conditions have been the cause of any shortcomings, and who dares fail to assume that new conditions and a new teacher will not find a willing pupil. It has happened times without number; it happens every year.

Human endowments are colossal. A class of students has so many potential abilities that, theoretically, they could shake the world. When teaching begins thoroughly to explore and rely on those abilities, students will go much farther than they do today.

Consider the case of a group of college students who awoke to the desire to provide a piece of worth-while entertainment for other groups of students in other classes meeting during the same time period. One student broke through

with a bit of verse on the seasons. The teacher quickly realized that this student's ability, never before discovered, had instantly leaped to considerable height. His faith was complete, while his students were thoroughly unaware of what they were able to do. From that poem the students produced, entirely by themselves, with a minimum of teacher guidance, a charming dance pageant, in which the whole class was cast. Using a tape recorder, one student read the lines, with appropriate pauses, while music from Beethoven's *Pastoral Symphony* was dubbed in behind the words. Four groups of students, guided by a director, developed four separate dances of the seasons, and the poem, music, and dance were coordinated into a costumed performance which brought enjoyment and satisfaction to both performers and audience. This work was done basically in class time, and the performance was given in class time. But the additional time and effort put forth by the students out of class, as individuals and in groups, was stupendous, although, in their enthusiasm, the pupils hardly knew that they were using up their energy and time. At the beginning, the whole affair was so inchoate, and the students so unaware of their abilities, that the matter seemed to be almost too visionary. But the point of this anecdote is this: the teacher was always without apprehension, and entirely certain of the group's success. This attitude was certainly based on the teacher's secure knowledge of the stupendous hidden abilities of capable young men and women. It was this knowledge that made the event possible. Not until we place a tremendously high estimate upon the powers, resources, and energies of our pupils will we permit them to fulfill themselves.

It takes many days to begin to know a group of students. In the meanwhile, there are things to be done. The fact that the pupils are in this particular class, with its special level of achievement and its special purposes, indicates that there are many things which it is obviously desirable to do. With small children this series of activities finds tacit acceptance.

There are certain things that small children all like to do, and in which they automatically see significance. They like to play with blocks, they like to use crayons and paper, they like to look at pictures and listen to stories, and they like to play spontaneously with one another. These things they can be permitted to do in some orderly and desirable sequence. Older students like to be given a glimpse of what possible achievements are ahead, and of the significance of what they may expect to do. Once they have grasped the meaning and purpose of what they are about, they will readily concur in many suggested tasks. Thus, older students will quickly agree to make certain experiments, investigate certain subjects, make certain trips, carry on certain activities. Such things will be suggested by the teacher's written curriculum. Once these have been launched, the class will be so busy in following them to their natural conclusions that it will be difficult to find the time to plan new ventures.

But while all this is going on, the teacher has a golden opportunity to investigate new human territory. It will quickly be discovered that this class is different from all other classes. The ingredients of the class mixture of twenty or thirty human beings is always more complex than any other possible set of ingredients, and the outcome of their working together is bound to be unique. An ordinary class of college students may find in their midst an actor, a violinist, a student who hails from Chile or from Labrador, a short-story writer, a tinsmith, or an expert in children's theater. These are mere examples, but they do indicate the special contributions which students can make to themselves. Once the teacher gets to know these unusual resources, and to find the special personal characteristics of these students, it is possible to use the assets which they provide, in combination with all other assets, in forming the pattern of the term program. In teaching, the students are the teacher's greatest asset, although nothing is more diffi-

cult than to make full use of these assets. In doing so lies the teacher's opportunity for genius.

Chapter 6

PEACE AND ORDER

Schools are the training ground for peace and order. It would seem that if there were anywhere that human beings could live together in harmony, it would be a school. For there the common causes of human breakdown would seem to be missing—greed for material gain, political corruption and bribery, personal power built on human slavery. Nevertheless, this reasoning is too specious. For in spite of the absence of many of the driving causes which produce breakdown in human conduct, the root causes of misbehavior are present in individuals. Young people cannot be thrown together, like vegetables into a stew, in the expectation that they will harmonize. For wherever there are people, there are conflicting interests; where there are conflicting interests, there will tend to be struggle. Young people are not naturally gifted with the ability to get along peacefully with one another. In fact, that they may learn to do so is one of the very main reasons why they go to school. Children do not come to school innocent of the weaknesses of their parents and of other members of their family and community. Nor, when they first come, are they more than self-centered little beings, almost entirely unaware of the rights and demands of others or of the modifications which group life demands of them.

During their life in school, children should travel from this state of social unconsciousness through the small loyalties of the middle grades to group or gang, on through the wider groupings of their high school societies or “sets,” to the age of the young adult in college or community. At last they

should become aware of the fact that there is a wider world of responsibility in which social ideals must function to secure the good and peaceful life of all men. This life of the school is humanity's one chance to lay the foundations of peaceful living in peaceful living itself. In the college years comes the opportunity to build a group of men who will direct affairs in honesty and equity, with true social understanding of the needs of both the strong and the weak. Woe be to that country in which the college teacher is suborned and browbeaten into teaching official thoughts, and political formulas which are factoried by a small group of men bent on bringing the whole world under their control. On the other hand, in college unruly thoughts must be brought into control, and students must be taught how to project ideas into action.

It is in children and in youths that the more physical and grosser problems of behavior appear. Yet at all levels the basic conditions of wisely controlling and directing pupils are alike. Although the method of application differs markedly according to pupil maturity, the general principles are the same.

Forestalling Misbehavior Is the Master Technique of Control

Controlling the behavior of children is probably the technique in which it is least possible to give teachers satisfactory help. This is due to the fact that most teachers show their chief interest in behavior after it has broken down. Their concern is nearly always *post facto*. They frequently come asking for help with a case of undesirable behavior which has already reached a crisis, and want to know what is to be done about it. This futile cry for help is all too familiar to teachers of teachers and to those who lecture to parents on child behavior. Teachers and parents too often want to lock the barn only after the horse has been stolen.

The secret of preventing bad behavior in children or adults is to forestall it. Energy must be safely directed into

other channels so that it will not flow where it is not wanted. Many teachers are not wise enough for this. However, the teacher's only hope of an orderly class is to create conditions under which orderliness must prevail. The only hope with individuals is to keep their feet so firmly on the right path that there will be little inclination for wandering.

This is a hard doctrine, and most unsatisfactory to those who have already failed in it. Such are inclined to complain of those who talk glibly of behavior problems but who cannot give a quick formula for remedying a classroom or family breakdown of which they have but a brief symptomatic description. Such inquirers frantically dislike being told, "It is your own fault." So they are never told it. Nevertheless, it is nearly always true.

Young teachers usually pass through two stages which tend to weaken their faith in those sound principles for the governing of children's behavior which they will ultimately have to depend on. The first of these stages is that of the substitute teacher. Substitute teachers are not in the position of the true teacher, and are really not in full control. The routine of an individual classroom is so intricate, and the personality of an individual teacher so marked, that a substitute teacher is at an instant disadvantage. Children, even in good schools, sense the dislocation. It is disturbing to them, so that they feel insecure, lose control, and often become disorderly. The substitute's best plan of action is to discover as much as possible of the regular teacher's class routine, and to set the children to work on it, almost before they arrive in class, or at least as quickly as can be. One young substitute adopted the custom of carrying with him a small black bag of materials with which to catch the attention of the class. The bag contained a storybook, some curios, some material for several games, and simple apparatus for a few science experiments, such as a tumbler to be inverted full of water supported by air pressure on a cardboard.

Another substitute, caught with a class in bedlam, simply

began folding paper into lanterns, boats, and other fascinating designs. The children quickly accepted the chance to make the things themselves, and so the class was brought to initial order which served as a platform on which to build a reasonably satisfactory day.

The teacher's first year of teaching is another peril to be passed. It is a common complaint of beginning teachers, when they return for a visit to their teachers college, that they have not been taught how to secure and keep good order. The truth of the matter is that they have been taught just this, but no matter how well they have been taught, and no matter how skillful the teachers they have observed and with whom they have done practice teaching, the actual complexities of full-time teaching are too great to be fully mastered in advance. When, occasionally, a teacher begins in a school in which the whole tone is good, and in a healthy class which has always been well taught, things can go very well. But in a rough school and a poorly trained class, teachers often swing either to a program too complex for their skill, or to one too brutally simple. If their supervisors are poor, such teachers quickly give up the resources they have been trained to use, and repudiate as visionary what they have learned of good teaching. Instead they adopt a few threadbare tricks and routines from their supervisors, and return to chide their instructors in the teachers college for failing to give them just such a stale bag of tricks, fit only for timeservers. These tricks they will pick up quickly enough without being trained to them, and their pupils are fortunate if they are not dogged by them through the rest of the teachers' dull careers.

Tricks and devices are useful enough as a temporary scheme to help catch one's breath when things are not going perfectly. But the art of controlling and guiding the actions of students, so that they will develop truly and fully, is more than a set of tricks. It comes only with deep and full understanding of human nature and of many complex principles and situations. It is a slow process at best, and teachers who

have been alert half their lives are always learning to be better teachers throughout the other half. Nothing short of continual growth and improvement is good enough for a real teacher. So it is not surprising if, in the beginning, the complexities of teaching are but haltingly and clumsily mastered, even by those most naturally inclined to good teaching. This is just as true in high school and college teaching as elsewhere, although the more simple impact of beginning to teach older people may lull the teacher into premature self-satisfaction.

The Teacher Is the Main Cause of the Style of Class Behavior

It falls to the lot of the alert teacher of education to visit hundreds of classrooms, in many types of schools and in many countries of the world. During these pleasant pilgrimages he sees situations diverse and illuminating. He sees the jackanapes, who puts his pupils through a set of spectacular tricks in which they recite ill-digested book stuff at the rap of a pencil. He sees the martinet, whose pupils salute as all pupils did in Hitler's Germany. He sees the droning teacher, who often sits in a university chair talking on forever. He sees the discussion leader, who can stimulate his pupils to talk by the hour on subjects about which they know virtually nothing. He sees classes of children who sit still all day because they are cripples, not free to move about like normal children; he sees normal children crippled by their teachers, who do not allow them to move from their seats or appointed routines. He sees disorderly classes, in which the children's misbehavior is so violent that only a show of teaching goes on; he sees listless classes, in which no overt disorder is visible, but in which doodling and daydreaming assist pupils through the boredom inflicted by a dull teacher. He sees every form of poor, mediocre, and skillful teaching and notes that they are all widespread. They occur, all of them, in every city and in every country.

Now this widespread observation leaves him with one

firm conviction. He cannot avoid the conclusion that these states of affairs are not caused by the pupils but by the teachers. Each classroom reflects the teacher's personality. Certainly he soon observes that the responses of children, wherever they are found, are much the same. True, some differences exist, and children from a neighborhood of stabbings and gang wars are more nerve-shocked than others. Pupils from poor neighborhoods are underfed and less virile and healthy than those whose home background is comfortable. Yet side by side, in the same neighborhood, and in the very same school, may be seen classrooms chaotic and tiresome and others happy and active. Not only this, but the very same group of children can be unresponsive and vindictive with one teacher, agreeable and responsive with another, and all within a single year. Surely it must be clear to anyone that the difference between a disorderly classroom and an orderly one is not caused by the children but by the teacher. The difference between a class in which little learning goes on and an earnest, decent, and pleasant center of learning is not due to the children but to the teacher. What supervisor is there who does not know that his poor teacher will fail no matter where the class, and that the good teacher will succeed with every group, in healthy suburb or unsanitary slum.

Perhaps this is the most basic thing a teacher has to learn about behavior of individuals and groups. The chief cause of order or disorder, of educational starvation or rich, full learning, in schools for children, adolescents, or adults, is *always* the teacher. We must all shoulder this responsibility, once and for all, and shoulder it quickly. Then we will begin to look within ourselves for the cause of our difficulties in teaching, and stop looking with disfavor or dislike on pupils who act that way because we ourselves produce that kind of a result. It is only when a teacher is brought under this conviction that the power of full control can come.

Nor does this inevitable teacher causation extend only to the large, over-all situation, but it applies equally to the

small, intimate, everyday situations with which a teacher continually deals. Teachers should form the habit of instant recognition of a situation which has gone wrong. The moment any unsatisfactory state of affairs is recognized, the teacher should immediately begin to consider what was done to cause it, not by the pupils, but by himself.

A few simple examples will suffice to illustrate a state of affairs which pervades the whole of teaching, from kindergarten to college, from one's early attempts at teaching to the end of one's career. Suppose that, in the passing of papers, confusion is noticed. The teacher's instantancous response should be: "I caused that confusion by the way I directed this situation. What can I do to prevent this the next time papers are passed?"

Now it should be noticed that there are many things that the teacher need usually not do at this juncture. It is not necessary to go to the supervisor and ask for a corrective procedure. It is true that teachers who have the type of supervisor who is small-minded, and likes to be flattered, might want to smooth his feathers by hypocritically seeking scraps of advice. This is often done. The answer will usually be a mechanical prescription such as "do it systematically, use paper monitors each time you distribute papers." Such a scheme would work every time, but it is a ludicrous case of overorganization and wastes much time. Nor need the teacher get out a series of volumes on teaching and scan them for help on paper passing. If the subject is written about anywhere, the teacher will never be able to find the needle in the haystack. What the teacher must do is to devise a procedure to meet the situation, and the particular teacher concerned is the only one who has all the data involved in this specific situation. Even such a minor matter as this is affected by the age of the pupils, the way in which they are seated—about tables, in a circle, or in rows—and by the question of whether the paper is easily accessible or under lock and key. The teacher must *think out* a procedure to solve the problem. Now we are at the heart of the matter.

The teacher must always think out a cause-and-effect sequence which will result in a sound pattern of behavior in the matter concerned. Whereas before, the teacher merely handed the sheets to a pupil to pass out, and produced confusion, the new plan is for him to ask a pupil to hand an approximate number of sheets to each row end to be passed down the row, leftovers being handed back to the front at the far end of each row. The teacher soon finds that this made-to-order plan works perfectly, just because it has been tailored to fit. This plan should then always be followed in this class, unless conditions change, and order and efficiency will prevail through those few moments of the day.

A more difficult case, although common enough, concerns the difficulty of arranging conditions so that students in a college class can actually do the reading to which they are committed. Let us suppose that the books chosen to support a set of class activities are of the finest, and are intrinsically interesting and well written. Arrangements are made with the library to put ten copies of each on the reserve shelf for the class of thirty students. The reading list for the first goal period of the term is posted on a chart in the college classroom. The books are briefly discussed and their purpose and special merits indicated. The reading goes well in one term, but in the next term two sections of thirty students are suddenly given to the teacher instead of one, and the library is unwilling or unable to double the number of copies of the books concerned. As the end of the goal period arrives, students begin to complain that they cannot get copies of the books they apply for. The teacher notices instantly that something is going wrong with the class. Behavior is not what is desired. Some students are actually not reading the books which they know they need, and which they are anxious to read because they are intrinsically attractive. Here is the problem.

It is at this point that the teacher must immediately seek a solution. But none appears. He must *not* attempt to lay the burden or the blame on his students. He must not proclaim

that this is their responsibility. He must not insist that had they done the reading earlier in the term the books would have been staggered and so could have been read. This is all wasteful fuming. It causes resentment and argumentative behavior just because, from the students' view, it is not only impractical, but it is already too late to be of use. The teacher knows that things are going wrong, but he has canvassed this situation beforehand and has never found a true solution. He asks the librarian what can be done. Has he ever heard of a solution to this problem? The librarian cannot suggest a way out. The teacher talks to the class and asks everyone to cogitate and seek for a solution. In one class no solution is discovered. A few days later, one student in the other class comes to him with a proposal. He suggests staggering the first half-term reading list with the second, alternating them for the two classes. In the following term two reading lists are posted for the first half of the term, one for each class section. In the second half term the lists are again alternated. This scheme, thought out only with the help of the students, solved the problem, and although there was some undesirability in the sequence for one of the classes, it was far better for the students to read the books out of sequence than not to read them at all.

These rather intricate and perhaps tedious examples serve to emphasize the point that no teacher will ever have a set of ready-made solutions, tricks, and devices to meet the needs of teaching. The teacher must refrain from looking to outside things for help, and must steadfastly resist blaming pupils for the behavior of a group. The only solution to problems of behavior in a class is to put oneself on the spot, and to accuse oneself relentlessly of causing what has occurred. Then one must in some way discover a procedure which will eliminate the cause of the trouble, and the trouble will disappear. There will always be some disorder, which will come from causes over which the teacher has not full control. But there is no basic situation that a good teacher cannot discover means to bring into order. And

there are few situations which are caused by dislocation which teachers cannot ameliorate even when the cause is unknown. Certainly it is not absolutely true that the teacher causes all, yet it is so near to the truth that it can be accepted as a practical working principle.

Modes of Prevention

Fortunately, a teacher does not have to think out every aspect of teaching in specific form. There is much that can be learned in the way of general action to prevent disorder. By giving careful attention to certain matters, the teacher can be sure that basic orderliness is achieved, and it is this basic orderliness which is most important. If the school day is nothing but a series of minor battles with this situation or that pupil, then a basic disorderliness stands in the way of everything else, and exhaustion is certain. If, however, a solid platform of regular daily orderliness prevails, spasmodic upsets can be easily cared for. The following precautions are means to this basic order.

1. *Each Member of the Class Must Know the Structure of Each Situation.* One of the most common causes of disorder is plain pupil bewilderment, or at least an indifference which amounts to the same thing, and is due to the absence of realized points of reference. Every pupil should, at all times, understand just what is going on, so that he may realize his own place in it. If nothing seems to be going on, then obviously he is being left to his own devices to fill in the time, and his efforts in this direction produce what the teacher regards as disorder. Consequently, the teacher must see to it that there is always something worth while to do and that each pupil is aware of it.

When a pupil enters a classroom, the first thing he does is look around for something to do. If there is nothing to do but wait until a bell rings, the beginnings of disorder and disinterest are already laid. The students chat, or read something at hand, or in the case of youngsters just slip into rowdiness. If, when small children arrive, they find

their room set up as a playroom, with blocks and paints and tables to work on, then they instantly begin their orderliness, and the day is started right. Older children should find it possible to set to work on activities left over from the previous day, or on their workbooks, realizing that work done now will free time for other things they wish to do later in the day.

The taking of attendance and the registering of lateness are often allowed to interfere with this proper beginning of the day. It should be so arranged that this does not happen, for otherwise a large matter is sacrificed to a small one. In one college class of three hours' length, the class was begun with a piece of soft music, during the playing of which students were allowed to quiet their restless thoughts and turn their attention to what was before them. At the conclusion of the music, one of the students unobtrusively and silently took the attendance for the required record.

2. *There Must Be Orderliness in Recurring Situations.* There are a number of class situations which constantly recur, and to which each individual pupil has a regular relationship. Once the school day has been safely launched in orderly fashion, every pupil needs to know clearly just what is his own part and where he fits in. So there should be certain regularly recurring situations which he recognizes and certain guidelines which he can follow with assurance.

A. DAILY ORDER OF EVENTS. Pupils need to be aware of a certain orderly background to all they do, which appears in the form of a daily order of events. This has already been set forth under the terms of Daily Program. Not merely the teacher but every pupil should definitely know this expected order, and near the beginning of the day or period should know of any proposed variations. This enables a student to see his work before him as a definite program of accomplishment rather than as an inchoate mass of possible events, interesting or otherwise. A basic routine for the day, changed whenever necessary, should be made clear to all concerned.

The posting of the daily program is needed in all classes, right on through high school and college. To assume that adult students can follow their work clearly without a definite outline given in advance is quite wrong. Adults need this guidance just as much as children, even when they are merely concerned only with information and ideas, which should be seldom.

B. GUIDELINES. Large crowds waiting in public places are often guided by ropes set up on metal stands into orderly corridors. Students need guidelines too, even if they are not made of rope. These guidelines are of several kinds, some of which are set forth as follows:

C. CLASS ORGANIZATION. The operation of a class as a group, rather than as a herd, makes some form of class organization essential. This applies on every level of teaching, whether the students are children or adults. In a class in which the teacher is the sole arbiter and director of class affairs, no class organization is necessary. The teacher simply issues the orders and attempts to compel the pupils to follow them. But in every case in which the class is regarded as a group, some machinery must be developed to make it possible for all members of the class to participate in orderly fashion. Tradition does not help much here. It is only for a few decades that even the ideal of the class group as a vital organism has come to the fore. It is thus not easy to find cases of practice to present as examples of good class organization. Some generalities may be more valuable than the examples which will follow.

1. There must be some established plan of group operation which enables the class to carry on while the teacher is merely on the sidelines. This means that some executive leader must be selected. Among small children this function is spasmodic. When children become sufficiently merged to work in any sort of group they may select someone to act, in a simple way, as a director. This may be merely for a short time during a class meeting, and pupils often call the director something like the "meeting runner." The leader

becomes more functional and active as children pass through the middle and upper grades, and the leader is usually helped by one or more secretaries, and sometimes by an accountant or treasurer. In college, the class leader is sufficiently mature to give rather full direction to the class, at times opening the class session, making announcements, coordinating class business and planning, and even directing the class as a substitute teacher in case the teacher is absent.

Several questions arise concerning the work of the class leader. *By what name should the leader be called?* The name given the leader will vary from class to class, from age to age. The class will look for a name which best describes to them the activity of the leader. Teacher or pupils may invent the name, and it can be something like leader, president, coordinator, director, or chief executive, as seems most suitable. *Should the leader be appointed, elected, or otherwise chosen?* The method of choice should vary with the circumstances. Probably a leader who is to act for a long time should be given a tryout. Students often elect one of their number who is not suitable for the responsible position of leader of the class. It often happens, especially with mature students unaccustomed to an organized class, that the teacher has to appoint the leader to be sure that his service is not perfunctory. *Should the leader serve for a full term, or should the leadership be rotated among the members of the group?* Circumstances will decide the period of tenure. With children it is most important that opportunity to learn the techniques of direction and leadership should be given to all children. When this is the most important value to be achieved, then the chairmanship should be rotated. In the case of adult groups, the machinery involved in change of chairman is likely to be cumbersome and the effect on the group disorganizing. However, it is desirable that opportunity to lead, on an advanced level, should be given to all students during some part of their college life.

2. In addition to the position of leader, there should be a number of other positions, each of which involves some

functional responsibility. The discovery of the functional activities of a group which can be furthered by individual direction and responsibility is not always easy. The more passive the class and the more it is devoted to merely intellectual pursuits, the less opportunity there is for functional organization. The more active the class and the more things it initiates and carries to conclusion, the more functional action of individuals will be found necessary. Among classes of children, individuals will be needed to do such things as open the class with a worth-while thought for the day, conduct the conference on Mondays, Tuesdays, and so on, deliver the mail, look after class money, pour out the orange juice at morning lunch, keep the plants watered, act as class delegate to the school council, and so on. Older children may need help from a class librarian, an editor for the school paper, a caretaker for the art materials. In high school or college, a class representative for various all-college affairs, an excursion secretary to arrange trips taken by the class, or a bulletin-board secretary may be needed. The essence of class organization is to find activities which may well be watched and directed by one individual in the class interest. The functions involved are cleared during the class period.

3. Special committees should be appointed for any new activities which arise. Students may suddenly be called upon to serve at some school function, or a suitable story may be needed for a play, or a class luncheon or picnic may need planning and arrangement. Whenever such a matter comes up, a class committee may be appointed and called upon to give a report to the class as soon as possible. Committee membership is one of the important functional duties which members of all classes can perform with benefit to themselves and to their class.

D. EXAMPLES OF CLASS ORGANIZATION. The following example of class organization indicates the way in which flexible, functional organization was actually worked out by one class. Such an example was adapted to the particular

class in which it was put to work. Other classes should work out an organization suitable to their own needs.

A FOURTH-GRADE ORGANIZATION AND PROGRAM ¹

CLASS OFFICERS

Class voted for first four, the others volunteered. Pupils decided on workers needed, except for class officers, which are standard.

President: Mary A
Vice President: Bolton
Treasurers: 1. Sallie
 2. Tony
Secretaries: 1 Jerry
 2. Linda
Errands: Emily, Bobby, Alice
Work materials: Ned, Billy K, Jane
Exhibits and collections: Gail, John B
Librarians: Pamela, Linda
Music committee: Karen, Michael
Bulletin boards: Ashley, Eddie
Housekeepers: Peggy, John M
Plants: Sandra, Ronnie
Paints: Raye, Robert, Miss R
Fish: Ned, Bobby

3. *Minor Techniques of Direction Are Needed.* There are dozens of small schemes and devices which a teacher may use to help children to be in the right place at the right time, to act separately without interfering with one another, or to act in unison. Many of these a teacher must work out, and think out, to fit the situation and to achieve a desirable result. Such matters vary so much, as a result of the individual teacher's particular style of teaching, that they cannot be codified. They are also much affected by class size, since the freedom which can be given in a small class is

¹ Class of Miss Mabel Richards, Bronxville Public Schools.

impossible when a class becomes oversize. Between twenty-five and thirty pupils make a good class, small enough to act as individuals, large enough to act as a social group. Oversizeness in a class deals a body blow to the best teaching. It is absolutely impossible to direct an oversize group by the ideal techniques which can be used with the smaller group. Group and individual movements have to be somewhat mechanized, and undesirable waits and artificial restraints have to be used, which cause at least some friction and increase behavior problems.

In order to develop the seminar technique, teachers should study the work of others and reject and adapt their devices as seems suitable for their own classes. In doing this, teachers should not be too seriously limited by generalizations made by others as to what is and what is not sound. For example, the Lancasterian positions of hands folded on the desk or arms folded across the chest have been so ridiculed that some teachers of children are afraid to use anything like them. Nevertheless, a very skillful first- or second-grade teacher who has some message to be taken home to the parents by every child, or some direction which must certainly reach every child without fail, may well say, "Now everyone sit for a minute with your hands folded because here is something for every single one of us to do, without fail." It is such exact devices that result in orderliness. Anyone who watches teachers at work will constantly observe that order or disorder results from what the teacher tells or neglects to tell the pupils.

For instance, if a teacher wishes a class to move from a circle, in which they have been listening to a story, to four work tables, there is a way of directing the movement that will bring disorder and a way of directing which will bring order. Careless teachers will often say, "Now we are going to break up into four groups and go to the tables." At this point the class makes a break for the tables, waiting for no further direction. After a scramble to the tables the teacher then gives the further directions that today Paul is to sit at

table 1 and Jean at table 3, and that everyone needs crayons. Confusion now ensues, while children scramble all over the room after one thing or another. Thus the teacher is the actual cause of the disorder and waste of effort. This could have been avoided if the teacher had arranged with the class always to name the tables by the numbers 1, 2, 3, and 4, and had said something like this: "Now in changing, please hold the circle until you know exactly what to do next. We now have time to make some rough designs for the Christmas cards you decided yesterday to make for your parents. Tables 2 and 4 are overcrowded today, so that Paul should sit at table 1 and Jean at table 3. As soon as we break up, will Arthur please come to me to get some paper to pass to each of the four tables. When we leave the circle, will everyone please first get his box of crayons from his own desk, and as soon as he has it, move quietly to his own place at the table and set to work. I shall come to each table to give you any special help you need. Is there anyone who does not know what to do now?" James says that he took his crayons home last night and forgot to bring them back. The teacher answers that there is a box on her desk he may borrow, and adds, "Now if you all know just what to do, get your crayons and move to the tables." No confusion will result from such directions. The operation will be conducted with exactness and precision, just because everyone knows clearly what to do. Even should James trip Jean in the process, nothing else will go wrong, and the misdemeanor will stand out sharply and can be dealt with separately without disturbing the class in the least.

Situation after situation has its natural line of action. If a picture is shown to half the class, and not to the other half, some pupils will strain to see it, or shout out, "I can't see." If properly held up straight, and rotated, the picture would have been clear to all. If an experiment is performed where all can see it, it goes off smoothly. If it is placed where many cannot see it, the pupils stand up and move about or complain. If an object is placed in one spot and the class

is told they may all look at it, everyone crowds around pushing and quarreling. If pupils are told that they may look at it one by one, or in some other clearly established order, all goes well. If pupils are restless, a scolding may increase their restlessness. If a song is sung the group is instantly quieted. So it is that teachers create or destroy order by what they themselves do. A skillful teacher directs the class to produce harmony instead of discord.

4. *Classroom Routines.* It was once thought that classroom routines were almost the soul of class order. Then came a time when teachers were ashamed of anything that looked as if it were not the spontaneous action of the children themselves, and the word *routine* was shunned entirely. The truth lies halfway between. The teacher must decide, in a given case, whether or not any freedom from a useful routine is worth more in the development of individual liberty and choice than the security and order to be obtained by using the routine. There can be little doubt about the fact that there are certain things that are repeated day after day, which go better if a routine is followed than if each pupil takes varying individual action every time the situation recurs. Freedom of action is a supreme privilege, but there are cases where a system is more restful and efficient and gives a greater feeling of confidence and security than a degree of personal freedom that approximates confusion. Adults like to make their own choices, but children, being immature, dislike being compelled to make choices which they do not have the experience or psychological development to make. When there is too much choice allowed, young children become restless, listless, or at best unstable and confused. This is a common state of affairs in the classrooms of some very superior teachers.

Simple routines can be an asset in any classroom. For instance, it may be desirable for a simple signal to be given on a musical gong to announce the morning conference. Suppose that the children begin play or work as soon as they enter the room. They expect this to be interrupted

sooner or later. This point of interruption is indicated by the musical tones of the gong. At that point, children will drop whatever they are doing and transfer to whatever part of the program comes next. In some classrooms, transition periods are made by merely watching the clock, all pupils moving to the next activity at the correct hour. There is something to be said, however, for a sounding signal, as this has a way of catching the attention. Transition routines are often followed in which at the end of one type of work, which uses notebooks, the books are put away by everyone at the given signal, and the materials for a different activity, such as painting, are secured and set up. In classes which are busily engaged in diverse activities such as arts and crafts, the teacher often uses an old-fashioned bell tap to secure a quiet pause from all while an announcement is made. Pupils soon learn that there will be a single tap, with no repetition, and quickly pause to be told, say, that a new supply of the much-needed red paint has just been secured.

Sometimes, however, much time is wasted in a class routine. The ordinary calling of the roll in high school and college classes is very wasteful of time and demoralizing to pupil interest. If the administration requires an attendance record, it can be secured with some other, less debilitating routine. Some teachers advocate the making of a seating chart, requiring each pupil to sit in an assigned seat, so that the teacher can quickly scan the classroom and note absentees. In this case it is clear that the teacher is sacrificing an elementary decency by not allowing adult students to sit wherever they wish and to change from day to day if they care to. No such schoolmasterish device is necessary, for the teacher or the class attendance secretary can quickly scan the room and see almost everyone present, after which only the names of those unnoticed need be called, amounting to only four or five names. If the class attendance secretary writes the names of the absentees on a card and gives them to the teacher, the teacher will very quickly know if a student who is depended upon for some activity, as un-

locking the materials closet, or giving a class report, is unfortunately absent.

More elaborate and strict routines have to be introduced whenever enrollment in classes of children climbs to thirty-five or forty. In larger classes, and in classes where the seats are fastened to the floor, many routines for standing, passing, moving row by row, distributing papers, pencils, and paints, and securing reading books and workbooks must be established. Even if teachers prefer to avoid routines, they cannot afford to do so if classes are oversize. Sometimes it is well worth a teacher's while, if the class is overlarge, to read an old-fashioned textbook on teaching and adopt some of its recommended devices and routines.

5. Clear Directions Are of Great Importance in Non-routine or Single Situations. In a good classroom, new situations are continually springing up, which follow no previously established pattern, and so require special analysis. Only when the teacher makes such a careful analysis, and thinks out just what is happening, and how it may move efficiently and effectively, can a class be directed to carry it out so that learning results for all concerned.

As new situations form themselves, they cannot be completely foreseen. The teacher must watch them as they form, and so direct them that every person concerned will know what his part is and how to carry it out. This is beautifully illustrated in the following account of the spontaneous activities of a group of six-year-olds several days after they had all gone together on a trip to the farm.

With a hop, skip, and jump they reach the school yard. Chatting merrily these bright, eager six-year-olds enter the building and hurry to their cloakroom door.

"Hi, Ben! Hi, Mary! Hi, Rich!" ring words of greeting. The sixes "belong," are important in this school, in this room.

"Is Mrs. Bentley here?" John asks, hanging his cap in the compartment bearing his name.

"I'll look." Unbuttoning her coat, Peggy turns to the classroom door.

Their teacher, as a mother substitute, inspires trust, provides security. Craving assurance of her presence, the children follow Peggy.

"Hi!" they trill, spying Mrs. Bentley bent over the crock of clay.

"Hi!" She smiles, straightening up. "Good morning, it is good to see you."

The children respond to her warm tone of welcome with quick smiles and laughter. They stand relaxed, eyes shining. Everything is all right. Everything is the same.

"Do you know what I'm going to do today?" John breaks the silence.

"I'm going to build—the farm, you know—and I've got a swell idea. You'll see," John assures them, as questions pour out, "you'll see."

"I'll build the corn crib—and here's some corn to put in it." Jerry pulls some kernels from his pocket. "I have some ears of corn I'll bring tomorrow."

"Where'd you get them?"

"From the farm." Nonchalantly he glances at his classmates, to enjoy their wonder and admiration, before explaining, "Dad took me over yesterday. I was telling him about our trip, and he wanted to see the farm, and we went, and Mr. Brown told us about everything, and—" Jerry pauses for breath.

"I'll build the hen house."

"I'll build the barn."

"I'll help you put in the horse stalls."

"We'll need hay—I'll bring some tomorrow—we just mowed our lawn."

"I'll build the cow barn. How'll I make the stanchions?"

Further plans unfold for reenactment of the trip as the six-year-olds hurry back to the cloakroom to remove

their wraps. Bill helps Ronald undo a difficult button on his new coat, Sheila pulls off Marcia's troublesome rubber, Peter straightens a twisted strap on Jim's overalls, but the discussion continues. Alive with ideas the children are enthusiastic, animated. Mrs. Bentley writes what they say, for future reference.

Since young children show no immediate reaction to trips, she has not hurried them, confident that in a few days time they will talk, build, sing, paint their experiences. The awakening has come. The children's growth, their potentialities, their needs are clearly and vividly apparent.

The children hurry toward the block shelves eager to reproduce the farm excursion. En route, Peter stops to write his name on a milk slip.

"Good for you, Peter—remembering."

Mrs. Bentley's praise reminds the others. Quickly they sign their names or initials ordering milk, orange juice, or water for the midmorning lunch. Committee members with jobs to do the first thing in the morning fulfill their responsibilities with the feeling that they are indispensable.

Then the building activity starts in earnest. Mrs. Bentley stands back watching quietly, noting what is said and done. Jack and Tom quarrel over a place to build; Esther grabs more blocks than she needs, dropping some on other children as she tries to reach her building space.

Interest and authority intermingled in her voice, Mrs. Bentley says, "Let's talk things over, and make plans together."

She sits down. The six-year-olds join her. They discuss the trip, speaking quickly and with animation. They bend forward, serious and laughing. Their recalls are vivid, dramatic, and accurate. Mrs. Bentley jots them down for future use.

Each child reports what he proposes to build. Initia-

tive, clear thinking, cooperative planning are evident. Mrs. Bentley lists the projects on the blackboard with the suggestion that each child stand where he plans to build.

"There seems to be room enough, doesn't there?" she comments thoughtfully. Then with a smile she glances around the group admonishing, "And remember—the blocks belong to all—take only what you need."

With thinking better organized, the six-year-olds return to the blocks. Occasionally Mrs. Bentley walks among the builders, discussing with each his plans and progress. If discrepancy or lack of clear thinking appears, she talks with the child individually, attempting to alleviate difficulties through recall of the trip experience.

Twice disagreements arise which the children are unable to settle. Mrs. Bentley comes to their aid, takes control. The sixes have confidence in her fairness, respect for her authority. With her guidance they solve the difficulty satisfactorily to each one.

The building activity holds the children's wholehearted attention for one hour. The six-year-olds carry on interrelated play, think things all the way through, offer and accept criticism and suggestion with little sign of antagonism, and use good six-year logic.²

The success of this hour of dramatic play was due to the careful, although subtle, direction by the teacher. The following evidence of this careful analysis and direction may be noted.

1. Knowing that a dramatic response to the trip taken to the farm was about due, the teacher was watching for it.

² From "A Good Day at School for the Sixes," by Elizabeth Vernon Hubbard. Quoted with permission from Neteier, Elizabeth, and Ewen, Alice M., "Portfolio for Primary Teachers," Association for Childhood Education, Washington, D.C.

2. While to the children the teacher appeared to be engaged in her own affairs, nevertheless she was watching her pupils assign themselves to various tasks.

3. At the right moment, when the breakdown of some of the children's self-direction occurred, she assembled the group to help them clarify their own action.

4. Discussion was then used to stimulate imagination by recall. Written notes were made to be used later, in another phase of the trip development.

5. Analysis was made of the whole farm-dramatization plan, and was placed on the blackboard as a challenge to beginning readers. In the process each child was able to see not merely his own part, but his place in the larger whole.

6. The use of space was planned, so that pupils would not interfere with one another, and each child knew just where he was to work. So conflicts were avoided and order assured.

7. While the over-all direction permitted most pupils to work, the teacher helped pupils who fell into disagreement, or who needed further stimulation.

In this careful direction lay the causes of orderliness.

The complex activity of pupils under a careless teacher becomes so disorderly that they disrupt their own play. A different teacher, by skillful analysis and direction, prevents any disorder from occurring simply by making clear to each pupil what he wishes to do, and how to do it successfully.

Mature students, also, need careful direction. It frequently happens that high school and college students have their work so carefully mapped out for them by their teacher that they feel no sense of participation in what they are required to do. This results in perfunctory fulfillment of assignments and a great deal of stepping from under responsibilities. In classes where only part of the work is pre-organized, students, according to the area of study, may propose a trip to collect plant specimens, a museum trip to study crystal formations, a special request lecture from a

member of the staff of an art museum on methods of restoring art objects, a nutritionally perfect luncheon, or a neighborhood housing study. It is in such cases that the teacher's skill is exhibited in directing students, planning an activity so that time is not used in wasteful gossip, focus on sidelines, and failure to make contributions to the group at the time when they are needed. A clear plan written on the blackboard, or in student notebooks, should make the actual scheme clear, individual participation and timing also being noted.

In the more customary forms of teaching, tremendous waste of student energy, with consequent loss of motivation, occurs in the simple matter of the reading of assignments. It is a common error to assume that college students can do without a basic textbook and read in the library. Students simply do not have time or patience to get *basic* reading from a library when all other students are required to get the same books at about the same time. Some will read, others will not. This is the fact, as against the pretense teachers so often allow themselves.

It is also absurd to suppose that all students can get their reading actually accomplished under ordinary reserve-shelf library schemes. If reading is actually to be done, the teacher must make certain that students and books actually make connection, at times when students are willing and able to read. To make students responsible is not enough. The reading must also be made feasible by the use of a basic text containing all the essential ideas and informations. In addition there should be both reserve-shelf and circulating-department copies of the same books, and a classroom library supplemented by a share-and-share-alike plan, worked out by the students and facilitated by a class librarian.

Disorder among mature students does not take the form of overt misbehavior, but rather that of occasional bad manners, or indifference. Sometimes it appears as out-of-class restlessness and spontaneous outbreaks of wider high school disorder. One of the most common forms of disorder

is neglect of the whole area under study. The common device used by many teachers, in an attempt to overcome this type of disorder, is to give periodic tests on regular assignments. This may actually increase the strain and aggravate the trouble, although it secures the appearance of assiduous compliance. The real road to overcome the disease of indifference lies through better planning and more skillful direction by the teacher.

Some of the Causes of Disorder

In the end, the teacher's great asset in securing peace and order is a good program. Nevertheless, it must not be supposed that breakdown will never occur, no matter how perfect the program, nor how able the teacher. The teacher does not control the whole life of the pupil, much of it being spent in home and community. Even if the school situation is perfect, disturbed emotional balance in the home or in the street life of the community are bound to spill over into the school day. No matter what the cause, it is certain that some individual pupils may show special weaknesses. For instance, a first-grade child may have tantrums in school, or some older boy may draw a knife or light a fire in the school building. Adult students, who are sometimes compelled to take professional license examinations in the community in the middle of their last college year, are often thoroughly disoriented to their classwork, and neglectful of the very work which will support them in their coming trial. It is necessary for teachers to understand some of the basic causes of disorderly behavior. This is true not only because it gives increased understanding of specific problems, but because it helps teachers to avoid doing things which will increase undesirable class behavior.

Frustration a Major Cause of Undesirable Behavior

Probably the greatest cause of all disorder is frustration. Frustration is the damming up of the energy which produces action or growth. Teachers must always think of

human beings as pushing forward toward something—near or far away. Just as the grass by the roadside, the alders in the bush, the straight, tall spruce trees push continually upward, each shoot, twig, and leaf striving toward fulfillment, so human beings are always moving forward toward fuller development and more complete form. This is particularly true of young people, who are in the period of rapid personal growth. Capacities are just budding, or are in fresh and vivid unfoldment. No moment goes by when young people are not seeking, attempting to press forward, eager in the chase. With children this drive is random, unpredictable. With youths it becomes relatively purposeful. In adults it has begun to narrow dangerously, and human beings need to be kept alive by the stimulus of their surroundings or by inspiration from within.

A child who has been relatively well brought up has had constant and varied opportunity for fulfillment and expression. In a good home the lovingness of children, reaching out toward those about them, has received ready support and response. But, in some homes, children's attempts to establish themselves are frustrated. There are homes, for instance, in which either the father or the mother, or both, is intemperate. Such conditions were once confined to the homes of the poor, but schools in the wealthiest communities today are continually troubled with the emotional instability of children whose educated and moneyed mothers are chronically drunk. Such parents are unreasonable and even brutal to their children at times, while at other times they make clumsy attempts to compensate by excessive weekly allowances and unwise indulgence, for example. Children whose parents are divorced, sometimes more than once, while their children are still young, are bewildered by lost love and changing loyalties. A few children are affected by such drastic disturbances as these, but many others by the quarrels of incompatible parents, and the disappointments and rejections which affect their daily

lives. Children who are unable to establish themselves by good conduct quickly turn to impertinence, roughness, teasing, quarreling, destruction of property, and continual irritating behavior toward the children who are their best friends, and to the teachers with whom they yearn to make friends. This further alienates those whose friendship means most to them, and the added frustration pushes them on to more spectacular behavior and the companionship of others who are unstable.

Projected into adolescence, this produces boy-and-girl problems and indiscreet and troublesome behavior. Children who have grown according to this pattern are those who develop into college students whose personal behavior is unstable. Such students are sufficiently mature to present a lacquered form of behavior in the classroom, for they have learned the rules of standard behavior and realize that their social and economic behavior must present a steady front. They quickly learn to lead a double life, and their private lives are troublesome to their families and sometimes to college authorities. Such is the fruit of continual and unremitting frustration, beginning in early childhood and mounting in severity as it grows. There are certainly other contributing causes, and the frustration pattern as outlined above takes somewhat different form in every social complex. The one described here is merely one common variety, met with in almost every community.

Now it is clear that teachers cannot directly alter the causes which operate to produce the misbehavior of such pupils. They can, however, understand the causes and can often help to remove their effect by sympathetic compensatory treatment. In the first place, teachers should know, as much as possible, the background of their pupils. This they can gather from the public and private remarks of the pupils concerned and often from their written work. Sympathetic teachers are always receiving confidences which give them startling insight into the homes of their community and

what goes on in them. Such knowledge as they receive serves to brace them against the behavior deviation of such pupils.

Impersonality and Objectivity Are Necessary

To protect the pupils with whom they deal, teachers must develop a complete lack of personal resentment, annoyance, or anger at the misbehavior of their pupils. They must never, never take the children's actions personally, or ever think of them as directed toward themselves or their own persons. They must regard pupils' deviations with cold, scientific indifference as specimens of behavior, just as a doctor regards symptoms as evidence of disease. The teacher's job is not to retaliate and recriminate, nor even to preach and lecture at the wrong moment. It is rather to withdraw, analyze, and treat the sickness so as to relieve it, and establish sufficient sanity in the pupil to help him return to normal. To add frustration to frustration produces nothing except further and more severe emotional breakdown. This non-personal attitude toward undesirable behavior is one of the signs of the really great teacher.

Consider the case of a disturbed child who makes some such impertinent remark before the whole class as "I won't do it. If you want it done you can do it yourself." Such a remark is usually accompanied by a flounce, and the class is agape with interest to see what will happen next. What should be the teacher's reaction directed toward the triple goal of (1) helping the disorderly child, (2) preserving the order of the whole group, and (3) preserving her reputation for fairness and good judgment?

In the first place, the teacher maintains complete poise. This is done by refusing to accuse the pupil, and by thinking of the misconduct as something temporary, not a real part of the healthy, normally acting child, but a sort of sickness. If possible, the teacher should hold to a picture of the child as normally good, and expect normality to appear again quickly. This is difficult to do, since as an individual

one has long fallen into the habit of personal resentment in the face of rudeness. But the teacher must develop a new habit of never accepting pupil behavior as an affront.

In the second place, the teacher must decide what to do about the matter. It is this part of the process that makes all attempts to teach teachers how to preserve good behavior so very difficult. What the teacher does at this point depends upon a complex set of circumstances, and varies from situation to situation, from child to child. The teacher is seeking to discover what will reach the child and restore the ruffled calm of the room. She may say, "That's not like you, Jane. Everyone in this room knows that your manners are better than that." Or she may say, "I guess things are not going very well here, Jane. Please stay a few minutes after class to see if we can find out what the trouble is." Or she may say, "This has happened several times before, and we don't seem to be making any progress. Jane, please go in and tell the principal about the matter and see if you can find out what the trouble is all about." (It is assumed in this case that the principal has the same constructive, helpful attitude as the teacher, and will not be a scold or a crank; otherwise the principal is a causer of disorder.) Or the teacher may realize that Jane is one of those deeply disturbed children whose home life pushes them to the point of breakdown. Any further pressure may cause an outburst which will be hard to deal with, and make matters ten times worse. In such case, she may simply pass the matter, entirely ignore it as of the moment, and let Jane's excitement subside while the class continues with its work. This is merely passing the matter into the future, for it leaves two matters to be attended to later on. (1) Matters must be straightened out with the class. An early opportunity must be taken, either with Jane in the room or preferably when she is out on some errand, to mention the fact that Jane has had to have special treatment, because she has been very restless, or because she has problems that we don't know anything about. If Jane is not present the teacher may

explain that she is trying to help Jane, and that if she appears to treat her too leniently the class will understand that she has a special reason. Under such circumstances children soon learn to respect the teacher's good will and good judgment. (2) Opportunity must be sought to help Jane, either by private conference or by this supplemented with what other professional help the school is accustomed to supply.

How long and almost tedious is such an analysis of such a simple case. Human behavior is so made up of complex shades and variations, and almost imperceptible distinctions, that in the absence of the full situation it is almost impossible to discover solutions. It is for this reason that teachers cannot be easily taught to deal with pupil behavior, nor can they be told what to do in the case of some specific misconduct for which they ask help from a person who was not present.

A young man, who has been teaching for several years, wrote the following wise comment on dealing with pupils:

Two years of teaching has taught me many things but, most of all, I realize how organic teaching is. It is a constantly growing matter, and we teachers must grow with it. There is no such thing as a set plan of teaching—you must work with children all of the time—and surely, children are not a static item. When I first began to teach, I tried to have all of my children conform to a “good” code—but now I realize that all children are different—that what is considered “good” for one, may not be so for another.³

Frustration is not merely a cause of unacceptable behavior, but it is also an enemy of learning. Consequently good teachers make themselves continually alert to discover what it is that pupils desire, what it is they are trying to do, what their minor and major goals are. As one watches the

³ Letter to the author from Bernard Marlin.

growth of sweet peas on a trellis and discovers the tendrils spiraling in search of support, with one's fingers it is possible to set the seeking tendril in the position of the support. This is teaching. For learning is the growing of the personality. As the individual beholds a new vision he sets out toward it. The striving is the action which is at the basis of all learning, for the learning is the by-product and the deposit produced by acting. The healthy, normal life is a series of good activities, projected by the person and carried through with a double result. For in the first place, learning results from acting, and in the second place, the desired goal is reached and satisfaction results. But if the process is interfered with, both the learning and the result are destroyed and frustration occurs. As the flood of energy is dammed up it seeks to find a way out, for since it is energy already generated, it must push for an outlet, even though that outlet is harmful to the person concerned and to his friends. Consequently, the teacher is always acting in such a way as to remove the barriers, the obstacles, and the impediments facing the pupil. To do this is to teach, not to learn *for* a pupil, but by clearing the path to prevent frustration, and so permit the learner to live and learn with joy.

Strain Produces Distortion of Conduct

Closely related to frustration as a cause of poor conduct, and as an obstacle to learning, is any condition of strain, no matter what the cause. In good elementary schools, it is a common practice to produce balanced conditions; in a good classroom the absence of strain is most evident. Customary methods of teaching, in both high school and college, however, very often produce conditions of strain which are really inimical to learning. For instance, lessons of the following type have been common:

The class sets to work, without motivation other than fear, on a textbook chapter, assigned on the previous day for home reading. The subject is, say, Causes of the French Revolution. The teacher barks, "Begin at the beginning of

the chapter, and tell what conditions preceded the revolution in France—Harold.”

Harold rises in his place and begins to recite, as best he can. The class is spellbound, for they know what will happen next. Suddenly the teacher interrupts Harold in the middle of a sentence. “That will do, Harold. You continue where Harold left off—Elsie!” So the lesson proceeds, the class under full tension until the next day’s assignment is given for home reading.

This is indeed a masterly instrument for securing certain pupil responses. In the first place, it operates so as to eliminate those students who are unable or unwilling to be browbeaten into learning according to the will of their masters, rather than in terms of significance, meaning, and value. Unintellectual students fall by the wayside. Students who do not easily surrender their integrity may, if they are very bright, do fairly well. Those who succeed by winning the high rewards and customary honors are of a certain intellectual cast. They do well because of one of several things—they are very bright in a nonimaginative way, they are willing to sacrifice integrity in order to succeed, or they are willing to work hard to curry favor with those in authority. It cannot be said that students do not learn under this and similar methods of teaching. But it can truly be said that such methods do not produce growth or develop originality. They develop habits of submission, unquestioning obedience, and uncritical acceptance of authority. They are good training for slavery. The fact that so many high schools and colleges have used this kind of method for so long goes far to explain why so many artists and inventors have been unable to tolerate academic life. It also would indicate that colleges have often poured into business and public life hordes of men willing to compromise with right action, for the great profit of those for whom they work, and of a lesser profit to themselves. Furthermore, this type of teaching produces serious strain. All individuals who learn to work in this way lay in themselves the basis for nervous trouble and

ill health in later life. Some experience nervous breakdown in the very process of learning, and others experience it later on. And certainly the grinding of this mill, while it often develops great staying powers in some, works against those of integrity and imagination, while failing to train those who do conform in those desirable characteristics. So a suborned school can train a suborned community.

High school and college teaching need much further development in the direction of a fuller knowledge of their students. By the time young adulthood has been reached, marked personal differences in individuality have come to the surface. There are some who are predominantly intellectual and are suited for such a regime. Others, equally capable, are notable for their artistic imagination, and still others for experimental activities of every sort in biological, social, and practical sciences and engineering. If strain, with its consequent waste, is to be avoided, such students need to learn in varying ways. Adaptation of the whole school structure and of the methods of class teaching should be made, if all students are to be trained to make their contribution to a complex and balanced society. As we move toward such a society, the more gross and primitive methods of teaching must give way to better forms of teaching.

A Sense of Security Is a Mainstay of Good Behavior

Nothing gives the individual stronger support in maintaining good behavior than a sense of security. Security is the safety that comes through the right kind of support at the right time and place. To feel secure, one must be sure of being surrounded by a solid background of sympathetic human beings, through whom one finds material support, emotional support, and success. All individuals, young or old, need this kind of backing. It is the platform on which they stand, the solid ground without which they are forlorn wanderers on the face of the earth.

Consequently, all teachers should govern their action so that what they do will always give support to the struggle in

which their pupils are engaged. This constant attempt to surround pupils with a reliable state of affairs and to provide a step ready for the climb of the moment is the mood in which every good teacher works all day long. It is very difficult to live by rule of thumb in teaching. To mark a misspelled word as wrong seem obvious enough. In the case of a capable speller it might be just the thing. But if a poor, stumbling speller is on the edge of defeat, it may be necessary to dwell not on the five mistakes, but on the ten words correctly spelled. In the case of a single word which is stumbled over, it may be better to give approval by saying, "You see you had it almost right. You might expect from the sound that it would be *alredy*, but notice it is *already*, and you'll get it right next time." So the teacher does one thing at one time, another at another, tempering the wind to the shorn lamb, always trying to give a feeling of security to the pupil. This very minor example is an illustration of the way in which teachers are always, by every move, giving support to the student where he needs it most.

Undesirable Behavior May Be Improved if It Is Possible to Remove the Cause

Teachers are able to give endless examples of the way in which unapproved behavior has been corrected by discovering and removing its cause.

When it was discovered that a boy of twelve believed that he had received a blow on the head as a child which prevented him from being able to do arithmetic, the teacher proved to him that this was not so, and his arithmetic immediately advanced. A child who was compelled to go to school with an adult whom he intensely disliked was disorganized and unable to enter into his schoolwork. When the cause was found and eliminated, there was no more difficulty in school.

The approved procedure in dislocated behavior is to discover the cause, if possible, and remove it, if possible. In some cases, where it is a mental blocking, making the pupil

aware of it is sufficient to make it disappear. This general technique is correct, whether the causation is frustration, strain, lack of security, or anything else.

But if the cause is not discoverable, or if it cannot be removed or modified, there are still ways of effecting a cure. Sometimes teachers are able to persuade pupils to overcome their difficulty by their own efforts. Some sort of compensatory action—sympathy, encouragement, advice, or reward—is often effective in securing the kind of change desired.

Punishment as Means of Improving Behavior

Punishment is always the least desirable way of attempting to improve behavior. Punishment is action which causes annoyance or discomfort to follow conduct regarded as undesirable. The difficulty with punishment is that it does not remove the cause, and seldom improves individuals' ways of acting. It merely introduces fear, anger, and other emotions which act as a deterrent. There are often bad aftereffects, mental or overt. Children learn to dislike teachers, school, learning. If brutally punished, they accept brutality as a way of life, and brutalize others. Children severely beaten in school have been known to perform such atrocities as stoning dogs and slitting a cow's udder. In cities, such children sometimes beat other children, bind them with ropes, or shoot at them with air guns. Punishment is only the use of force to attain an end which the teacher has been incapable of securing by preventive measures. It is always a confession of failure on the part of the teacher. It gains class calm and order at the expense of individuals.

All this is not to say that teachers do not and will not punish children. There is an old code which teaches people that punishment is redemptive as well as corrective. Those who hold to this code may develop considerable self-righteousness in their giving of punishment. Many a teacher of the old-time flogging type was a plain sadist, and the theological tenor of the times allowed the community and the teacher himself to carry on his neurotic practices with

approval. He was called a good *disciplinarian*, a term which a good teacher holds in derision. Today, most informed professional people not only do not believe that gross punishment improves character, but they do not even regard it as corrective.

There are few teachers who do not at times use some form of what could be called punishment. It is even quite possible that there are special cases in which physical punishment is of value because of the special form of personality deviation of certain individuals. It is possible that a physical shock may diffuse nervous energy in cases of hysteria or minor tantrum. Its use in this case is not really punishment, merely a corrective shock treatment. It is possible that children who hurt others badly may be cured by being hurt themselves. In such cases, the improvement would be due to a widened horizon and a development of a defective imagination. The special situations may be disputed by extreme theoreticians, but will be supported by many who have had controlled practical experiences in observing the conduct of children.

Ordinarily, measures used by teachers in an attempt to improve slightly deteriorated order scarcely merit the term *punishment*. They are merely small deterrents attached to poor behavior in accordance with the psychological law of effect. Such minor annoyances are those of being deprived of participation in a group, being asked to sit in a removed place, and being called aside for questioning. Such methods of control are most effective when the teacher who uses them is well accustomed to giving praise and reward as well.

I'm Sorry

When a learner sees that what he has done has caused harm to himself or others, when he recognizes that his conduct has been wrong, he has won a victory. The teacher who has helped him has also won a victory. The outward and visible sign of the victory are the words "I'm sorry." Such words, sincerely spoken, are the groundwork of progress.

The incident is over. The individual concerned has taken sides with himself and with the rest of the world.

Specialized Help in Conduct Problems

If a teacher has succeeded in establishing a general regime of good order, any disorder due to individuals of disturbed personality will stand out clearly. When teachers are required to carry all the children of the school system because no provision is made for special classes, there are bound to be some pupils who have psychological problems. There is an old saw which is a guiding light in all problems involving conduct. It runs, "There is no such thing as a problem child; there is only a child with a problem." When a pupil has a real problem, the teacher just does the best that can be done. Every teacher learns to be an amateur psychologist. On the other hand, all teachers should learn to recognize that line at which a child's problem passes from a mere temporary disturbance to a deeper matter in which expert help is needed. Fortunate is the school in which the principal, the psychologist, and the teacher work as a team in helping with the solution of severe cases of personality disturbance. Such matters do not come under the ordinary rules for maintaining good class order. They demand specialized knowledge and its enlightened application. These pages are not the place for the discussion of such matters. However, there are many standard case books and helpful studies which no teacher should fail to read. In spite of the fact that no two cases are exactly alike, case studies of the successful work of other teachers and psychologists do give a background of concrete illustration which is worth much.

Chapter 7

CONTENT OF TEACHING AND MEANING

The wife of a college professor, who was giving a summer course away from his home university, decided that she would improve her spare time by taking a course in anthropology, in which she was developing a personal interest. During the first lesson the teacher, who was new to the field, advised the pupils to stay strictly away from the library, since the lectures to be given would be complete, and cover all requirements, so that effort in other directions would be a waste of time. But in this case the student was of a scholarly turn of mind and, after a few none-too-satisfactory lectures, she decided to disobey and visit the library.

A brief examination of the books on anthropology unearthed an attractive text. As she examined it, she discovered in the early chapters of the book the identical material which the teacher had used in the lectures just given. Here was content indeed, but the student might have bought the book and stayed home from class to read it.

The Meaning of Content

Content is often confused with curriculum. But content is a previous thing. Content is that vast quantity of knowledge and information which lies in the background of curriculum. It is a storehouse from which to draw, as a cook draws from the food stocks of the community in preparing meals. All through his own long period of education, the teacher has been exploring and amassing content. In the elementary school he has gained some small amount of it, in high school a great deal. More and vast quantities have

been thrust at him in college. He has picked up much as a result of his experience with people and events; he has read thousands of volumes and miscellaneous accounts of this, that, and the other thing; he has explored libraries and studied obscure documents. He may rightly be regarded as a fountainhead of information, and members of the community expect him to be just this.

Yet few people, in assessing their own education, regard themselves as the possessors of unique pearls of wisdom. On the contrary, most teachers would admit that much of the information they have secured is scarcely worthy of the name *knowledge*. Much of it is undigested of little personal significance, and they find little use for it.

How foolish it would be to approach teaching with the notion that one's pupils should be deluged with a mass of details assembled from this complex mass, and pointed up with one's most recent studies from some timely book or pamphlet. This kind of teaching would be little more than dumping rubbish. Cogent and important as knowledge and information may be, they are of small significance to those who have no use for them. A teacher is more than a tank in which information is stored and distributed in fixed amounts like gasoline at a filling station.

Nevertheless, no one would think of employing a teacher who was not, as it were, filled with information and knowledge. It is assumed that all teachers know a lot. They should indeed be specialists in knowledge, and know far more than their fellows in field and shop. Knowledge is a definite and important part of their stock in trade, and they must be continually adding to it by incessant and unremitting reading and study.

What then is the use of content, if one may not simply turn on the tap and let it run forth upon a thirsty world? Its value lies in the fact of its instant availability. One does not play every card in his hand in a prearranged order; he watches the game and plays the card that the situation demands. So it is with teaching. From the large store of

knowledge, the teacher selects for use that which furthers the pupil's learning-in-hand. If the pupils are asking to hear stories, the teacher knows enough not to select worthless tales but to read "Just So Stories," stories which demand for their appreciation the subtle tonal interpretations of a superior reader. But should a pupil who is usually a reluctant reader want to read by himself, the teacher will provide him with a number of books within his reading ability but likely to suit his taste, and let him choose, say, "Mystery Island." It is the knowledge that counts, but the teacher draws upon it to meet the needs of the individual and the needs of the moment. The mastery of subject matter is assumed in a teacher, but mastery in the use of the correct element, at the correct time, in the correct way is just as necessary.

Information

The most common form of content is information. Certainly there is more information in the world than anyone can master. For millenniums, knowledge has been collected and compiled, and new data are continually in the making. Just what information and how much of it should a well-posted individual be expected to know? Obviously it varies with one's purposes. A doctor must know a great deal about the human body, an engineer about strains and stresses. So what an individual must learn depends upon what he is doing and what he expects to do. Since one cannot know every bit of information, he may know a lot about a certain kind of thing. A biologist knows a great deal about living things, and a chemist a lot about dead ones. Thus bodies of specialized subject matter, or content, have sprung up, and this has resulted in considerable confusion in the life of schools. The assumption is too often made that a special teacher knows more than he does about his own field, and less than he does about all the others. The truth of the matter is that a special teacher is not much good unless he

has a wide base of general knowledge, about every field, to use as a steadying factor in making his own field useful.

In the high school and college, the teacher is often regarded as the purveyor of special information. In the elementary school, he is a specialist in general information. But on the whole, no teacher can be really good unless he has a vast fund of knowledge and information of the widest possible range, and in addition considerable skill in gaining more.

Skill

In addition to knowledge, a teacher must have skills. The skills vary greatly with the area and the level of teaching. Elementary schools are loaded with skills for the pupils, since language, reading, writing, spelling, and arithmetic are basically vast, complex skills which children must master. However, since these are the common skills of all educated people, the elementary school teacher has no special problems in mastering them. Teachers of older students must often have acquired very special skills by way of teaching content. Language and mathematics teachers, musicians, and artists must all be the masters of special skills of considerable difficulty and complexity. This is also true of teachers of vocational and technical subjects. Skills are often a large part of content.

Laws and Principles

Knowledge and skills form the major part of content, but perhaps its most potent and valuable part is composed of laws. The minute one has made a valid generalization, one has discovered a law. A law is a rule which a certain group of events always follows within a system. Thus one may know that a barometer is a weather instrument, and may also know how it works, but the most functional knowledge of all is the law that a falling barometer indicates a weather change, probably in the direction of poor weather or a storm. We know that if we apply heat a thing tends to get

hot. If we let it stand it generally cools. We know that a scowl tends to bring back scowls, whereas smiles reap a crop of smiles. We know that if we plant a seed it will grow, and that if winter comes spring cannot be far behind. These laws of practical events and of human conduct are of infinite importance, and the good teacher holds much in the way of content that is knowledge of law and of laws. Such laws are one of the notable assets of the teacher, and the true teacher is always giving his students new revelations. Without such revelations and insights, informations and skills are a sorry heritage.

Content Must Be Selected According to Significance and Meaning

Since teachers cannot teach all of content, they must be constantly practicing the art of selection. Much of the difference between the good and the poor teacher lies in the way in which this selection is made. For there are varying methods of organization, on the basis of which materials are thrown together for greater convenience in dealing with them. Some of these methods of organization favor learning, but others stand as an obstacle to it. This will appear from what follows.

1. *Functional vs. Nonfunctional Organization.* One of the greatest vices of the high school and college teacher is the nonfunctional organization of subject matter. It is this which caused William James to make his well-known quip, "The college professor is the greatest enemy of his subject." It has long been a characteristic of the academic mind to enter a field of activity and to rearrange its materials and data in a form in which it is not found in nature or in life. Now there are times when such a reordering, or reclassification, is valuable, as in the use of varying schemes to classify shells or plants. Even in such cases, the differences on which the classification is made have been observed in nature. But in many cases, the basis of classification is purely arbitrary and contrary to the mode of use. This is true, for instance, in the

teaching of harmony and composition, when the order of teaching chords and progressions is an artificial one. No composer uses such a scheme in writing music. The student must learn this scheme, and then unlearn it when he writes music, discovering some practical scheme for himself. Opposed to this method is a functional method sometimes used, which is organic in nature. It regards tone as central and teaches the various tonal progressions in a codified form so that they can be used by any amateur from the beginning. One of these schemes is classified for the professor's convenience. It is nonfunctional, for it will not work. The other is ordered functionally, and because it follows the lines of practical use it serves the learner well.

This nonfunctional method of classification is nowhere more prevalent than in the field of education. Most teachers of education organize their subject matter in terms of abstract concepts and remote principles, which form convenient discussion material because they force the student to recast his practical knowledge of children and events into an unfamiliar and impressive form. But what teachers need is the organization of educational principles and data in a form in which they will appear in the actual process of teaching. Functional teaching of education will select and classify in terms of the elements teachers deal with and the tasks they perform. Thus teachers can quickly make use of what they learn to improve teaching.

2. *Organization in Terms of the Teacher vs. Organization in Terms of the Learner.* This is a similar matter, but it is one of method rather than of content. In selecting his subject matter, does the teacher think primarily of the perfection of a system, which he hopes to perpetuate as it was given to him, or does he think of the *approach* which the student will make to the subject matter? A teacher of mathematics, for instance, is the possessor of a system, a general instrument, which has been codified and taught in the same approximate order and sequence for years. If the teacher's goal is to secure a student's mastery of this set of codified

material, and enforce its reproduction in standard form, the student gains little, and may fall by the wayside and be regarded as a failure.

Good teachers, on the contrary, would seek for a linkage in the life of the student with the material to be taught. This would vary from student to student. An artist might have problems of projection and analysis, a biologist of statistical measurements in genetics, an engineer with stresses and strains in engines and bridges. Thus, beginning with a specific mathematics, a teacher might move, if it were desirable, to a general mathematics.

An elementary school teacher would not attempt to teach arithmetic in a book order, as a series of meaningless processes. Rather would arithmetic emerge out of such a situation as halving and tripling a recipe for cookies baked in class, or marking out a tennis court, or measuring a baseball diamond to check on its size. Preselection of materials and wholesale acceptance of standard organizations of subject matter foredoom the teacher to failure with many pupils. Knowledge of students' needs, problems, and interests, however, makes possible a far more active and successful selection of teaching materials, and avoids the loss of many pupils who otherwise would drop by the wayside because they discovered that the material as presented was useless to them.

Selecting Content for Significance and Meaning

No matter what the method of organization, and no matter what the method of teaching used, the selection of content continually falls on the teacher. This is the very nature of teaching itself. There are certain cardinal principles which a teacher should keep in mind, if the selection of content is to be sound and constructive.

1. *Select for Intrinsic Interest.* There are some things which are intrinsically interesting to most people, and some which are uninteresting and dull. For instance, an anecdote about people, humorous or full of action, instantly awakens

interest in almost everyone. The odd, strange, and curious always interest by their very novelty. Living things, especially animals and human beings, are a constant source of interest. Again, people like to touch things, see things, and watch things happen.

It is not always easy to use such principles when one is preparing or selecting materials and activities for students. A simpler rule is to realize that what oneself finds interesting is likely to interest others. It is safe to ask of any piece of information, or any activity, "Would I like to hear it?" or, "Would I like to do it?" If so, it may very well be a good starter to get students into a learning situation. So if a child is to be encouraged to read, he should be given a fascinating and worth-while book. If one is preparing a talk or an address, he must avoid the dull data which abound in many a book and select attractive and interesting morsels.

2. *Select What Is of Present Use.* It should be perfectly clear that a person would be more interested in learning lines from Shakespeare if he were to declaim them as one of the characters in *As You Like It* than if he were simply ordered to learn some special passages. In fact this has been demonstrated over and again in practice. A class of students, told to learn three hundred lines from a play by heart, just does not learn those lines. But students who are cast in a play learn many times three hundred lines, just because they have a use for them, and they learn them with relative ease. The lines are the same; it is the actual living use of them which makes the difference.

The more urgently a thing is needed now, the easier it is to learn it. Students will slave over a foreign language, and stumble over it forever, if it is just a school exercise. Those same students will learn the heart of that language in several weeks if they find themselves in the country in which it is used, and compelled to rely on the language concerned to secure the common amenities of life.

It cannot be too clearly understood that knowledge is not of permanent but only of temporary use to an individual.

We learn only to forget. The reason is that, in all that we learn, we must have some consciousness of use. In schools, it is common to make an artificial use do the work of motivating learning, and for this purpose tests and examinations are devised as barriers that must be overcome. But once the barrier has been crossed, forgetting sets in. Sometimes this is even consciously aided by the learner who says, "Now that I've passed my mathematics test I want to forget it. It was a nightmare to me."

Knowledge is never plain knowledge, but knowledge with a purpose. It is like a pontoon bridge built by an army to reach the far side of a river. Once the army is across, the bridge may be removed. Students only master knowledge easily when they see a purpose for it, and, when the purpose has been fulfilled, the knowledge is laid aside. We all have a strong sense of reliance upon books and records in these modern days, and so we feel that books and libraries may be entrusted with most of knowledge, since their memories are far more persistent than ours. We all realize that when we need a book of directions we can read it. So why burden our memories unduly?

3. *Knowledge for Special Use.* The next most powerful driving force in the securing of knowledge is having a special use for it. Few of us would be able to learn the vast complex of data which a doctor must have at his pencil tip for the writing of prescriptions. So it is that a student who regards himself as a specialist in literature will remember all sorts of obscure anecdotes and details concerning the life and writings of many authors, while one who considers himself an expert on sea shells will glibly reel off Latin names recognizable only to his compeers.

4. *Knowledge for Possible Use.* It is true, however, that we will all learn a certain amount of material, if we can see it as being of possible future use. The less remote and the more likely the use, the better. If the time of use seems too far off, or if the likelihood of use seems small, then we are inclined to decide that this learning can wait. So a student

will go through much to become a dentist some day, and will learn all sorts of possibly useful physics and chemistry. He may find himself cold to literature, or to creative writing, and in creative matters inclined to sculpture. Not all students can learn history with a will unless they see in it some possible future aid to them in assuming the oratorical or governmental duties of public office. Hope springs eternal in the human learner, and this supports him through much in the way of involved and detailed study. But in the end, learners only learn that in which they see significance.

Meaning Must Be the Heart of Content

Meaning is significance to the individual. It is when content seems insignificant that it is meaningless, and it is for this reason that so much of education is actually meaningless. On the other hand, the great skill of a teacher lies in a special ability to reveal meaning to students. The dull teacher labors through a poem; the brilliant teacher, by a skillful molding of sounds, a lilt, or an intonation, brings the whole poem to life, and students are struck by its beauty or touched by its meaning. One lecturer drones on; another adds a vital spark to what is being said that strikes fire in the individual. One teacher moves among a group of restless, confused children; another seems to breathe gentleness, and the room is active, busy, orderly, and peaceful.

It is not enough for a teacher to go through the paces of a lesson, demonstrate an experiment, lead a song, show a moving picture, hold a discussion. The skill of the teacher lies in that small gesture, that ideal emphasis, that right word spoken at the right time. In that moment of teaching the veil is removed, and the students' eyes are opened. Out of the melee of events, they glimpse law and order. What was before inchoate and incomprehensible is instantaneously worth while and clear. Content has found its worth in meaning. In that inspired act which reveals truth lies the genius of the teacher.

Chapter 8

METHOD AND TECHNIQUE

One of the most widespread errors commonly held about teaching is that one who is in possession of a large and lusty body of subject matter is equipped to teach. The more mature the thinker, and the more advanced his ideas, the more likely he is to believe that he should be provided with a university chair from which he would be able to provide a series of lectures which would change the world. He is sometimes obsessed with the idea of direct teaching, under the impression that the more quickly his ideas are cleared the sooner will they go into operation in the academic and social complex.

The error lies in the false belief that the learners whom he would influence are ready for his teaching. He expects mere youths to be interested in the problems which concerned him only after he himself had reached middle age. Adults so often expect the young to begin where they themselves leave off. This cannot happen any more than a sapling can bear fruit. Nothing seems harder to grasp than that scholars and learners are in reverse relationship in the matter of what must be taught. The values of a curriculum seem important to the teacher just because he has learned them. The student, not having done so, is naturally unconcerned. The very fact that he is without learning makes him despise or neglect what the educated individual knows to be worth while. It is the untasted cup which is of little interest, for the draft is the acquired taste of one with experience.

The Gap between Teaching and Learning Must Be Bridged

The gap between teaching and learning must be bridged by method. This is, indeed, the function of method, to find common procedural ground between the teacher and the learner. Each looks at a different side of the shield. The approach of each to what is to be learned is different. So the teacher must explore, invent, imagine, and work to help the learner build a bridge forward, beyond his own position, to the ground on which the teacher already stands. The teacher must take the pupil by the hand, as it were, guiding him forward over a road that the teacher has previously trod.

It is most difficult to put into words this subtle process of suitable technique and method. For what the teacher knows and what he would teach, which is seen so clearly and which holds for him so fascinating a pattern, must be cast into the hopper to appear in some fresh and varied form. This implies an act of surrender on the part of the teacher. He must not cling to things as he sees them. He must perform some rite of sacrifice, he must give up his smugness, and search eagerly to discover the terms upon which his pupils will deal with him. He must run the risk of failing to teach. He must forget that he knows, and remember only that his pupils do not.

Teachers must not fail to reckon with their pupils. They are potential power. Their dynamic is prodigious, their resources and abilities tremendous. They are determined to learn something, and it is for the teacher to discover what they wish and what they are willing to learn. So, in the beginning of teaching, he is anxious to discover their assets. What energies are they willing to offer, and what beginnings are they willing to make? What program will they propose, and what proposals of the teacher are they willing to accept? The curriculum should reveal to the teacher just what these students are maturing to, whether they are child block

builders or high school pupils longing for a vacation. It is for the teacher to tempt them, to dangle before them the fruits of learning, to make them catch a glimpse of the fact that something is worth doing. If a teacher can do this, he will be deluged with effort, eagerly offered and spontaneously given. Such is the reward of the methodizer. He will not need to give stones, since he will be besieged for bread.

The Recasting of Subject Matter

Subject matter is practically always in the wrong form for teaching and learning. It must be recast, reorganized, by learners. Consequently, the teacher is absolutely compelled to forget ideas, knowledge, and information, and persuade his pupils to do something. This is the key to method. The teacher must somehow prevail upon his pupils to act. It is pupil acting that will recast the subject matter and give it new life. Just as a magnet creates a field, according to its own shape and form, so will an acting pupil create a field of thought which will bring the materials of learning into pattern and beauty. It is what the pupil decides to do that determines the conditions under which he will consent to learn. Thus a youngster who will drag unwillingly through a workbook in arithmetic may gaily embark upon the task of discovering how much he is costing his parents every week, or how this compares with what his chum, his sister, or his older brother is costing. A youth who turns sadly away from a textbook in physics will cheerfully build a motor and eagerly read an account of how it works. A college group which ordinarily drags through an hour of professorial history, will enthusiastically work together to write and act a sequence showing the parallel workings of war and peace during the past hundred years. In doing this the students will read extensively in historical materials to make their dramatization authentic.

There is no side-stepping this process of self-identification of the learner with what he learns, and it is as valid in

teaching adults as in teaching children. The proud and learned scholar is no more immune to its workings than the humblest kindergarten teacher. The method of the teacher either provides for student action in the line of what he is learning, or the learning goes on slowly, with struggle, and is never really successful. It is the smoldering and smoking of choked-up embers rather than the clear and burning flame.

Furthermore, this law of dynamic learning through action is as true of groups as it is of individuals. Pupils who take a fall trip together to visit a factory, a ship, a museum, or a vocational school will work better together throughout the whole term. A rural church recently found itself; after the resignation of their minister, the members began to conduct the service themselves, one reading the lesson, one directing the singing, and others speaking the sermon. Active participation in the life of any group is the secret of group health. The more passive the participation, the less the learning.

Nor need participation be merely on outer and manipulative levels. A Saturday club for the reading and discussion of Emerson's essays is as valid, for the mentally active adult student, as a pet show for elementary school children. A discussion is just as valid an activity as a children's classroom circus. But nevertheless activities involving thought and scholarship require a background of experience just as definitely as more overt activities. The intellectual who attempts to limit his experience to secondhand abstractions of writers of philosophy or theology soon becomes lost in abstruseness and hairsplitting. Such individuals evolve abstract beliefs which hinder living and obstruct their judgment and action in dealing with individual problems. In the name of justice, they would cast the prodigal son in jail instead of restoring him to his place in the house of his father. There is no more ineffectual teacher than he who dwells, with his students, in the vacuum of loose data and obscure essences.

Involving Pupils in Action

The initial problem of method is always that of involving pupils in action. No matter who the teacher is, or what he is hoping to teach, he must devise some scheme for getting his pupils to do something which is natural and obviously worth while to them, and which will result in the learning of the values suggested by the curriculum. This is best illustrated by the presentation of cases and examples, and these are provided in the following pages. But there is a further aid to be discovered in a simple generalization, which stands as a philosophical guide or formula for teachers to use in their over-all direction of learning. Such a guide, while it should not be used in any hard or unyielding fashion, is nevertheless of very practical assistance in reminding any teacher of just where he is in the large, generalized process of teaching. The sequence of teaching events may be described as follows (the sequence is valid both in dealing with a single individual and in dealing with a group):

Step 1. The Learners Set Up a Goal. Early in the learning process it is essential for the learner, or for a group of learners, to set up some definite goal or objective. It is not enough for this to be some general thing, like Learning Some Lessons, or Doing the Work of the Course, or Getting Our Work Done. The objective must be a vision, etched out with clarity and definiteness. It could be Holding a Thanksgiving Party, or Making a Wind Machine to Illustrate the Effects of Wind on Flight of Planes, or Opening and Operating a Restaurant. It must be couched in terms of something obviously worth doing, something which learners of the age, and with the interests of the group concerned, can see as genuinely worth while. Because of the nature of current colleges and high school systems, this is not often done. But it has been done in such cases as that of the students of the Yankton (South Dakota) High School who, following de-

signs and blueprints worked out in their classrooms, built a complete, full-sized residence.

The basic technique by which such things are done is the conference between teacher and pupils. Shortly after the group has met, the question of what they are there for must be brought up and squarely faced. They are together for a purpose. The purpose needs clarification by discussion. It should be set forth in words and objectified in some way, such as writing it on the blackboard. All through the process of the conference it should be clear that the situation is genuine, that this is a meeting of minds in which teacher and pupils are together working to discover what, under present circumstances, is the best thing to be done.

It is natural that in this situation the teacher, who is specially equipped with respect to the whole area and who has previously taught similar groups, should be the leader, the one to provide specialized knowledge and to offer some of the most potent suggestions. There is a teacher-pupil balance in each specific group situation which the teacher must explore. In some groups the pupils are submissive, patient, and anxious to do what the teacher thinks best. In others they are full of original suggestions, some suitable, others unsuitable. By means of orderly processes of discussion, the whole situation must be analyzed and thrashed out. The various suggestions may be written on the blackboard and discussed until the final goal is clarified. In case of great hesitation, the teacher must finally urge a suitable decision. In other cases, the class, without much aid from the teacher, plows through quickly to a satisfactory decision. Teacher and pupil suggestions are made. The teacher's experience and advice are often needed to prevent the choice of goals which, although good, are impossible because of the limitations of time, space, or schedules. For instance, a class of teachers which meets from four to six in the afternoon will almost always have some student who suggests that the best use of class time would be to make some classroom visits and discuss what is seen. And this in spite of the fact

that no schools are in session from four to six in the afternoon. The teacher's cue, in such a case, is to suggest places, classes, and schools specially worth a visit in the student's own time.

Throughout the decision stage, the teacher must carefully watch to see that the activity chosen by the pupils is not just a camouflage for textbook study. Students will often suggest studying a series of reports and combining the results in a class discussion. This would seldom work well, because the sources are usually poor and the resulting procedures tedious. The teacher will attempt to have the class define their goal in the form of some specific act of considerable sweep, one which will involve for its completion wide and varied study of the areas in which the curriculum for the group suggests that learning should take place. Thus it would be good to have a class choose such activities as making a large Golden Book, with illuminated pages and text, showing life in the Middle Ages; taking an old automobile to pieces to study its construction; or visiting a mining town to study living conditions.

Once the large major activity or list of activities decided upon for the period or the term is made, it should be transferred to a chart and kept hanging in full sight of all. If this is not practical, it should be kept in each student's personal notebook. This is the program for the term, as the pupils see it. It will be administered by the teacher in a setting of much additional and partly unrelated work, which must be programed and motivated as the days unfold.

This unfolding of the activities that develop day by day, in which the major goal is kept in mind but in which new matters that arise daily receive attention, is a very complex matter. It demands great skill on the part of the teacher. But a program well begun has a way of motivating itself. There is nothing which stirs action like action. Activities snowball, as the days pass, and gradually more new suggestions come in than can be assimilated. It soon becomes clear that so much has already been undertaken that, in

order to complete it all, new enterprises must be ruled out. Both class and teacher soon begin to rely on the daily program, as it appears on the blackboard, and find that events press for scheduling beyond the capacity of the school hours. Thus a wholesome business gets under way, in which learning just happens as a fortunate and pleasant result.

Step 2. Teacher-Pupil Planning. During the initial period of goal setting, one of the pitfalls that students must help to avoid is unwillingness to adopt a goal because the plans for its fulfillment have not been made. Once the goal has been chosen and passed upon by the teacher as feasible, plans can be made. But in a very definite sense it is necessary here to leap before you look. Students who propose an activity will have some conception of how it can be carried out, whereas others who do not see this may object that it is impossible. It is in the planning period, following the selection of the goal, that the project is clarified and made acceptable to the larger group, by analysis and imaginative visioning.

The conference is again the technique used during the planning period. Once it has been decided what is to be done, the question of how to do it must be faced. As the group confronts the making of a feasible plan, suggestions come from every direction. The more student initiative and student thinking have been previously fostered in similar situations, the more quickly and thoroughly the planning will be done. If a group of children decides to have a post office in class, they may be asked by the teacher to list just what it is they have to do. They may furnish the teacher with a list of questions to be placed on the board. (1) Where shall we place it? (2) What shall we build it with? (3) Where will we get the materials? As the work progresses, other matters will have to be jointly planned. The group may have to decide what the roof will be made of, what the shape of the building will be, and how it is to be furnished. Later a decision must be reached on who is to be postman, and when.

A high school or college class, which decides to write a play, must have a series of conferences as the work progresses. Suggestions of themes and subjects might lead to an investigation of a series of Indian legends. A committee, reporting back, might choose the legend of Hiawatha. The class might read part of the poem by Longfellow, or possibly all of it, and, as the planning merges into the doing there will be less need for new planning. For the execution will make clear what further steps are essential.

PLANS SHOULD BE RECORDED. Whatever plans are made should be recorded. In fact, the recording of plans and decisions is one of the major techniques of teaching. Some simple and practical record should always be kept of what has been decided and what is proposed. This record may be kept in several ways and by different persons. The teacher will keep some records, the recording secretary may keep some. Committee chairmen or secretaries should keep track of all committee decisions and proposals. The teacher or the student leader should always have some written record of plans and proceedings. Thus programs may be made up in terms of what is to be done, and the complex details, which might otherwise be forgotten, can be kept in order and used without loss. So, as the story of the play appears, it is written down. The list of characters is written down. The acts are written out in full as they are developed into a script, the cast is set against the characters, and notations are made for suitable scenery and costumes.

Step 3. The Pupils Carry Out the Plan until the Goal Is Reached. As the action proceeds, the teacher becomes more of a supervisor and an inspirer, less of a participant. It is for the pupils to do what they have set out to do. It is their scheme, their plan, and their work. It is what they have wished for, and upon its completion they will get the credit. The teacher buttresses flagging interest; gives encouragement where pupils lose faith in their work; provides help in the way of suggestions and the provision of materials; and assists pupils with unfamiliar processes of writing, perform-

ing, costuming, locating books and directions, matters of scheduling and timing, and in fact in any way in which help is needed.

This process of doing and completing a work is a backbone of the work of a group for as long a time as is necessary. This core of activity is the basic structure of the work of the class. From the shaping of this activity, the form of the class is molded. The teacher becomes skilled in on-the-floor planning and functional design. Each day must be lived in such a way that gain is made and learning goes on. Reading, study, the use of materials, the use of ideas—all must progress, and all must be supported and guided by the teacher.

Finally, on some certain day, the goal is reached, and the failure or success of the work is made manifest. But there must be no failure. What occurs must be a success, and with it will come all the satisfaction of work well done, lessons well learned, progress satisfactorily made. The Thanksgiving party is given, the floor map is made, the post office is built, the play is presented. It is in the sound and certain reaching of the goal that power is discovered, and successful living is forecast.

The Functional Direction of Activity

The reason that it is extremely difficult to give directions for teaching is that whatever goes on in class must proceed according to function. Function, however, changes continually, for it is built up in terms of the unique structure of what is going on at the time. Consequently, the teacher must become an expert in functional analysis of activity, so that he can do his work properly, as it were, on the floor. The teacher's day-to-day, in-class, procedural work requires constant instantaneous, functional analysis and direction of what is under way. This complex ability comes only with experience and wisdom. It is for this reason that it takes time for any and every person, no matter how well informed and how intelligent, to become a good teacher.

It is of prime importance for the teacher to see just what is going on. Is a student ready with a suggestion, but too reserved to make it? Is a suggestion which finds general favor a practical one, in terms of the circumstances? Is there a book that may be exhibited or used as a reference? Should a new committee be appointed or an old one heard from? Is it possible to anticipate the need of materials so that they can be secured in time for use? Which of a series of things must be done first, and when must a pause be made for other events which interfere? The teacher must be constantly on the alert to see how things will work and how they may be made to work best. In short, what is functional? What is natural and efficient for the particular act in progress? To give guidance, under such changing circumstances, is the peculiar responsibility of the teacher.

Furthermore, the teacher must be alert to see that the implied learning actually takes place. Is there any thankfulness in the course of the Thanksgiving party, is there any sense of its relationship to the origin and meaning of the event being celebrated? Has the pageant of Mexico brought home to the pupils the reality of another way of life? Have they heard something worth while, read something worth while? It is possible to go through the motions of a complex act, and to skim along the surface of what is done, without learning much of anything. The teacher must see to it that there is a true widening of knowledge and deepening of experience. Students must be kept sufficiently awake to fulfill their own best selves, and to devote themselves to the proper realization of what they have determined to do. What one chooses to do should be done thoroughly and well. In their struggle for learning, pupils should not be allowed to exist below the hunger line.

As Teaching Fulfills Itself, Form Emerges

There is a beautiful symmetry and a wholesome substance to a good learning experience. This can be described and admired. As a long period of teaching is nearing its

completion this completeness should be made clear, both for the encouragement of the teacher and for the development of the pupils. It is not enough to have pupils pass through an experience. They must pause at its end and contemplate it. Otherwise its passing will be as a summer breeze or a rainy day, something which just happened to happen. Even in our personal life, much of our experience slips into the past without observation, so we form a habit of neglecting it. It is not good that learners should work hard, and struggle for learning, and yet lack that sense of accomplishment which learning should bring. Consequently it is desirable that the form of what has been done should emerge and that it should receive clear recognition. The small lad who has read ten books should be able to contemplate the list of authors and titles which has gradually been made throughout the term. The assembly program, so ardently prepared and earnestly presented, should have its measure of applause. The class giving it should receive congratulations from other classes, other teachers, parents, and principal. The newspaper, so arduously written and widely distributed, should be pointed to as something in clear form, well done. The pictures painted, the arithmetic and the spelling, and the story written should be collected into a work folder at the term end and set into an attractive portfolio. It is when a class, which has spent many a day in many a venture, at last hears the reading of a class history that it realizes for the first time what tremendous strides have been made, and how much, and how many good things have been accomplished. The form of a learning experience does not show itself by itself. Its reality and its wholeness need to be displayed, if the work is to be appreciated. It is not enough that there should be form. Form should be exhibited and made manifest.

Portraits of Teaching

Method, such as that which has been described above, has a certain elusive and general quality to it, which makes

it hard to grasp. If it can be supplemented by more complete and well-arranged accounts of actual teaching, it can take on more meaning and significance. The following accounts may be thought of as portraits of teaching. They display, in their rounded contours, a certain satisfactory orderliness and completeness which make thoroughly evident their inherent validity. It is not easy to describe teaching briefly in a way which will make its form and pattern clear. The only persons present throughout a full term of teaching are the students and the teacher. The students are, from the very nature of the case, not thinking in terms of teaching but in terms of learning. The teacher is often not even able to describe the artistry of the work which has been done, and seldom has the skill in the use of words, and in analysis and presentation, to write down the kind of account which sets forth to advantage the teaching which has been done. Consequently it is difficult to secure the necessary experience and the proper data to describe teaching well, or to set forth an account which will make the method and the techniques clear to the reader. It is hoped that the following brief accounts can be thought of in terms of the discussion above, and that they will be not labored accounts but portraits which will reveal both composition and structure, and create real admiration and the will to emulate the excellent teaching which they reveal.

THE KNIGHTS OF THE ROUND TABLE—A PORTRAIT OF A SIXTH GRADE ¹

1. *The Teacher's Purpose and the Pupils' Interests* *Merge*

Early in the school year, the children were studying the Medieval period in history. Instead of having them go into the general history of the period to learn and

¹ Basic account quoted with permission from the Bronxville Schools Bulletin.

forget facts in which they had little interest, Miss Corbett decided that the children would gain a more thorough knowledge of their study if they took up some one colorful phase that greatly appealed to them. The summer previous, the teacher had made a study of heraldry, a subject that she believed might suit the purpose. However, rather than announcing to the class, "We are going to study heraldry," she left it to the children to decide. She told them some of the interesting things that she had learned about heraldry and held several discussions on the subject. Then she sat back to await developments. If the children showed enough interest and enthusiasm in the study, then heraldry it would be. If not, some other phase would be made the center of interest.

2. Teachers and Pupils Agree on Goal—a Coat of Arms for the Family of Each Pupil. They Plan It and Set to Work on It

DECIDE QUICKLY

However, Miss Corbett didn't have to wait long. The study of the coats of arms, banners and shields of the days of chivalry is a fascinating one, and the children soon became excited about it. They began talking about coats of arms. The teacher asked those who had a family coat of arms to bring it in for the class to see. The others were to design their own. And thus, in a very informal manner, the study of heraldry began.

The children read simple but authentic books on heraldry to learn what coats of arms were, their use and design. They then sketched, like the designs of chivalry, their own arms and began work on their shields and colorful banners. For the background of the times, they read romantic books on chivalry, such as stories of King Arthur's court.

3. *The Goal Is Reached and a New One Set—a Round Table for the Sixth Grade*

When the bright colored shields, banners and coats of arms were well under way, the children decided that they would go into the study even more thoroughly. Following the example of King Arthur, they decided to start a Round Table. All the members of the class were expected to become members of this honorary organization, but certain standards had to be set for those who wished to join so that being a member of the Round Table would be a real honor.

4. *Discussions and Planning*

Heated discussions were held before the entire class could agree on the standards of social relationships and conduct which should be required for membership. But finally nearly all agreed on the following vow of initiation: "I will earnestly try to be courteous, kind and just; also to be trustworthy and to make others happy; never to be afraid; always to do my work well and to endure hardships cheerfully. This is the high and solemn vow of the Knights of C C C." (C C C was decided on as the Roman numeral for 300, the number of the class room.

In order to join, each one needed only to accept for himself this vow set by the class. Many immediately joined, but there were six or seven who were so honest with themselves that, though they longed to accept, they realized that they had not been living up to the vow and refused to join until they felt that they were capable of doing so. However, in a few weeks all were prepared to join and the Round Table was formally organized. All took their vows and topped off the memorable occasion with a party, at which ice cream and cake were served.

5. *The Pupils Carry Out Their Plans*

TAKE KNIGHTLY NAMES

Once members of the Round Table, all took names of knights of the days of chivalry. The class had its Sir Lancelot, Sir Gawaine, Sir Percival, and Sir Tristram, and the children insisted on changing Miss Corbett's name to Merlin, the Wizard. The children planned to run their organization as much as possible themselves, but the Wizard was on hand to straighten out any difficulties.

Every knight made his desk his castle, placed his shield next to it, and unfurled his banner on a staff overhead. Thus the days of chivalry became a part of the lives of the children. They worked at their arithmetic and spelling in their medieval castles, and they lost themselves so completely in the spirit of the age that they even called their best friends by their knights' names. They became so used to this that, without a trace of self-consciousness, they spoke to Bill as Sir Gareth, and Joe as Sir Kay.

6. *From Both the Teacher's and the Pupils' Standpoint, the Class Reaches Its Goals*

While this project was going on, the academic subjects were not neglected. There were set periods of the day for the more formal studies such as arithmetic, but the others were, as far as possible, linked to the main project, thus furthering the interest in all the school work.

The children read more volumes of fact and fiction in studying the days of chivalry than they could have done in regular reading periods. They also did more writing than ever before. Everyone wrote tales of the adventures of knight errantry, and interest in these stories was so great that they were put together in a book, "Tales of Magic," a very attractive little book with

its neat and decorative manuscript writing and its many illustrations.

NOTHING NEGLECTED

Nor was Oral English neglected. The children had much practice in expressing themselves clearly on the weighty problems of the Knights of C C C. Of course, art work was a very important part of the project. Several friezes of knights in armor and their ladies were painted by the sixth graders. And a high standard of artistic accomplishment is shown in the coats of arms, the shields, and the banners. Work in shop on the staffs for the banners, the swords, and the shields was also part of the program.

All this was important but even more important was the change in the relationships of the children toward each other. At the start of the year they did not get along any too well. They were not very friendly among themselves, and frequent quarrels resulted. The vow of the Knights of C C C went far to change this. The children were really gripped by their project. To them it meant something to be a knight. It was an honor to be lived up to. The quarrels stopped. Instead of trying to interfere with others, the children learned to cooperate and help each other. They became responsible for their own conduct. Their whole attitude toward each other became more friendly, and they learned how to live together happily.

AN UNGRADED CLASS STUDIES ABOUT FOOD ²

1. *The First Activity Suggested by the Teacher—Make the Classroom More Homelike to Live in for Six Weeks*

It is a natural beginning for a group to improve the living conditions they are to share for six weeks of a

² Adapted from an account published by the Education Section of General Mills, Inc., Minneapolis, Minn., "A Nutrition Education Workshop Pays Dividends."

summer session. As a result of planning to this end, children brought flowers; planned pictures, including a mural which was later executed; decided on curtains which were later designed, dyed, and hung; told about their hobbies, thus introducing wood carving and clay work; and appointed committees for housekeeping tasks. In fact, committees were set to work on all these activities, reporting their suggestions at the class conference, or group meeting.

2. A Study of Foods Is Rapidly Set under Way. Goal and Plan Set Up

When a class meets for six weeks only, there is no time to develop an interest slowly. A subject obviously close to all the pupils must be agreed upon and plunged into immediately. After a brisk discussion of the children's breakfasts, and the importance of using food wisely, two procedural lists were recorded.

HOW WE CAN FIND OUT ABOUT FOOD

1. Ask someone who knows.
2. Read books, newspapers, magazines, pamphlets, and encyclopedias.
3. Listen to talks.
4. See movies.
5. Prepare food.
6. Eat foods.

THINGS WE WANT TO KNOW ABOUT FOODS

1. What foods are good to eat?
2. How can we plan our meals?
3. How can we balance our meals?
4. Where do our foods come from?
5. How long should certain foods be cooked?
6. How should we prepare food?
7. What are good, inexpensive foods to buy?

8. How should food be served?
9. How should we act at the table?

3. *Planting and Keeping a Garden*

In the preplanning of the work by the teacher, three activities had been arranged for, on the assumption that the children would respond to the study of foods in the way expected. These preplanned activities were (a) keeping a garden, (b) feeding animals experimentally, and (c) having a part in the school lunch program. This preconsideration of activities likely to occur in the chosen realm, in this case food, is the form which term planning should take, in the active form of teaching.

The garden activity was launched simply by a proposal that all the children make a picnic of planting and working in a nearby garden. The children planned their garden work, adapting what was done to their own age. Three times in the term they visited and worked in the garden, on the last occasion being able to eat lettuce, radishes, and onions for their lunch. In the meanwhile the class spent some time studying plant foods, the children bringing in a potato, a plum, barley, and a tomato, which were shown and their characteristics and uses as food discussed. From these activities developed a series of experiments with plants as follows: (a) The seed was denied light and water, by being placed in a bit of cotton in a dark cupboard. (b) The seed was given sun but no soil by being placed in cotton on a window sill. (c) The seed was given soil, air, and sun, but no water, by placing it in oven-dried soil on the window sill. (d) The seed was given air, water, and sun, but no soil, by placing it in cotton kept moist on the window sill. (e) The seed was given air, water, soil, and sun by planting in moist soil on the window sill. (f) The seed was given a lot of

water and sun but no soil and no air, by covering seed with water, and placing it on the window sill. As time passed the results of all these experiments were examined. A biology teacher was invited in to talk over with the children the way in which plants make foods, by building cells with the help of air, sun, water, and soil.

4. *Experiments with the Feeding of Animals*

It was not difficult to interest the pupils in a food experiment with animals. A cage of four rats, brought into the room, caused plenty of excitement. They soon planned an experiment, based on the use of the "basic seven" food groups, in feeding rats. After feeding and watching the rats, and weighing them once a week, the pupils found out several things. They discovered that rat A, which was given plenty of all the basic seven every day, gained more in weight than any of the other three. He gained steadily, his fur was smooth, and he had the best disposition. Rat B had all the basic seven, but not enough for his appetite. He did not thrive so well as rat A. Rat C had only crackers and water, and, of the four, his growth and condition were the poorest. Rat D had all the basic seven but one, but even that lack caused him to lag behind rats A and B.

Summarizing the experiment, one child wrote, "The rat experiment meant quite a bit to me. It shows the foods that I should have to eat, and how much of them. Rat A proved what foods I should eat. Rat B showed how much to eat. Little rat C (the little rat whom I like very much, for I took care of him) shows me that we should have not just one kind of food. Rat D had the same as rat A, only no milk. That experiment proved many things, not only that, but it was fun."

5. *Helping with the School Lunch Program*

Lunches brought to school by some children were a starting point for the lunch program. In the course of it, the children prepared a dining room and kitchen for serving meals, planned lunch menus with the teacher's help, and familiarized themselves with the basic seven and their use in proper meals. They helped with the marketing, made cookies, and sometimes prepared a whole meal, set the tables, helped with the dishes, and listened to poetry and stories in afterlunch quiet periods. Through these activities the pupils gained tremendous insight into the correct preparation and serving of food.

6. *A Concluding Assembly for the Parents*

The whole food study was brought to a rounded conclusion by the presentation of an assembly program which was attended by the children's parents. The parents were entertained by being told of the term's work and shown the tie-dyed curtains the children had made, their murals, finger paintings, flower arrangements, and booklets on "Our Garden" and "Our Picnic." After this the parents were taken to the dining room, and the children served refreshments.

These activities were heavily guided by preplanning, and stand as a good example of the way in which a program, which must be rapidly set up in a short period, may be successfully guided by a wise provision for natural, functional activities. Such a series of activities formed an excellent medium for the accompanying learnings in reading and writing, with special reading lessons and the writing of booklets and stories; art activities in the making of curtains and murals; and arithmetic experiences, well supported by such duties as weighing the rats and computing the results and the

various measurements involved in buying, foods and preparing food from multiplied recipes.

EXPLORING MICHIGAN'S RESOURCES IN THE JUNIOR HIGH SCHOOL CLASSROOM ³

Miss McAndrews, teacher of a class in community civics in a central Michigan town, considered the conservation of natural resources a problem vital to her pupils. She wished to have her boys and girls approach this problem by way of their local interests and experiences. Several possible avenues of approach occurred to her but she decided to introduce the subject with an informal discussion of the fishing experiences of the pupils. Had Miss McAndrews been teaching in some other school with different local conditions she might have introduced the discussion in some other way.

Fishing Experiences Exchanged

She did not inform her pupils that they were going "to study conservation." She knew that the one thing that William liked to do was to fish, so she asked him about his luck at fishing during the past summer vacation. Presently not only William but others were telling of the fish they or their brothers or dads had caught, and like true fishermen, of the "beauties" which had broken away.

Mary Brown had gone fishing but had caught only little fish too small to keep. This caused William Smith to remark, "It's lucky for you that you didn't keep those small fish. Some girls make me sick the way they mess around at fishing—and don't know enough to throw back the little fish. Half of the girls don't even know that it's against the law to keep them."

³ Quoted with permission from a pamphlet of the State Department of Public Instruction and Department of Conservation, Lansing, Mich.

Fishing Laws, from a Social Point of View

"William," said Miss McAndrews, "I think that you are unfair to girls. Boys are often guilty too. You, however, have mentioned one law about fishing. What are some of the other laws?" With the help of the members of the class they quickly named many of the legal measures regarding fishing. To check up on this John Black offered to stop at a local hardware store in the morning and secure a copy of the fishing laws booklet. Then followed an informal discussion of the purpose of the several laws. The regulations seemed to fall into three groups:

a. Laws giving fish a better chance to spawn (limited seasons for fishing, motor boat laws)

b. Laws giving fish a chance to grow (size limits, etc.)

c. Laws which encourage fishermen to be fair with one another.

"A true sportsman is going to be square with other sportsmen and he is going to be fair to fish, animals, and birds," said Henry Boyd. Henry's father was a great fisherman. "You know," he went on, "I see now that all these laws are simply making us do what we ought to have sense enough to do anyway."

"It's like what we were saying about the policeman last week. The game wardens are our friends. They are trying to make better fishing for all of us," said John Black. The class had begun to think of the matter from a social point of view.

"My uncle is president of the County Conservation League," said Mary Brown. "I heard him telling dad about what his organization is doing and what the state is doing. They are all trying to make better fishing."

"Suppose you talk with him some more," said Miss

McAndrews. "Possibly he will be willing to talk to our class."

"I'll ask him," said Mary.

A Committee Visits a Fish Hatchery

"The government has a fish hatchery over at ——. If we could send someone over there we might find out a lot about what is being done to hatch and plant fish," said William Smith.

"That is a good idea, William. Let us choose a committee to go tomorrow if some father or mother will do the driving," said Miss McAndrews.

Local Opportunities Surveyed

The boys and girls talked about good places to fish, about the reasons they were good, and where they were located. Almost at once an ideal fishing lake was named but with a regret that it was all privately-owned and not open to the public. This suggested the making of a list of fishing places in the locality that were open to fishermen. The class had to hurry along to other phases of conservation but on the third day time was taken for reports from the committee which had visited the fish hatchery and for the report from Mary Brown (Her uncle promised to come later.) and from others who had interviewed various individuals.

An Inventory Is Taken

The class made a simple inventory of the knowledge that it had thus far accumulated. Miss McAndrews, of course, did not ask the pupils to memorize the items in this inventory, but she helped them to classify that which they had found out about fish in this manner:

1. Data about varieties of fish, such as
 - a. non-game
 - b. game

c. commercial

d. noxious.

2. Data about hatcheries, feeding stations, rearing ponds, and "planting" of fish.

3. Data about fishing regulations.

4. Data about methods of "conserving," diseases of fish, stream improvement, etc.

5. Data about the agencies cooperating in this work.

The Bulletin Board Committee Is Functioning

The class had selected a bulletin board committee to gather and post material on the conservation of natural resources. This committee was able to find many useful articles and pictures from newspapers and magazines, especially from the outdoor section of the Sunday papers. The bulletin board material was changed each day. One of the members of this committee brought to school a supply of back numbers of magazines which contained pictures, stories, and informational articles about the out-of-doors. These were very useful. The monthly bulletin published by the State Department of Conservation was especially useful.

Pheasants and Other Game Birds Are Discussed

On the second day, between the two discussions of fishing, Miss McAndrews asked a few questions about pheasants. These beautiful game birds were rather plentiful in the surrounding country and several of the boys had hunted them. The previous summer, John Wallace's father had secured some pheasant eggs from the state game farm at Mason. A Plymouth Rock hen had hatched them and John had been greatly interested in his flock of unusual "chickens."

Many questions were raised about the habits of pheasants, about the hunting laws protecting them, and about the needs of a variety of birds. It was very easy to bring into the informal discussion the impor-

tance of various methods used to provide food and cover for birds. Presently enough unanswered questions were accumulated to warrant the selection of an investigating committee to report any suggestions it could secure on how to make life less hazardous for this bird.

When this group made its report it emphasized that if a farmer wanted pheasants, he should leave plenty of shrubs and plant life along his fence rows and in the "kettle holes," particularly during the nesting season. Arthur Brooks, a farm boy, was particularly impressed with the device called the flushing bar which, when fastened on a mowing machine, "flushes" a nesting pheasant. Mary Jones was surprised to find roses named as one of the best winter foods for pheasants. Roses are particularly good because the red seed-pods last in spite of winds and snow.

"I'll never set fire to the old marsh in winter again," said Arthur Brooks. "The birds must have food hanging above the crust of the snow."

While the pupils were talking about game birds, one of them mentioned prairie chickens. Someone denied that there were any of those supposedly more western birds in Michigan. This, of course, called for a finding of the facts about prairie chickens. Most of the class were indeed surprised to find that they were so numerous in Michigan.

"Both the pheasants and the prairie chickens are strangers in Michigan. The prairie chickens have immigrated from farther west while the pheasants are from Europe and Asia," said the girl who had looked up the matter for the class. "And the prairie chicken had relatives here, for he is a part of the grouse family," she continued.

"I think that we should know what our Michigan game birds are, and our animals too," said William Smith.

"Our *Game Law Digest* has the names in it and I'll make a list of them," volunteered Eugene Bassett.

"Eugene, suppose you take the game birds and we will give John the mammals," said Miss McAndrews. "You will find some good material also in the *Game Division Reprint* from the *Biennial Report*."

Practically all the members of the class volunteered to work on committees that would attempt to gather information about specific matters of wild life conservation. Here are some of the matters investigated:

1. An inventory of the game to be found in their locality (both birds and mammals).
2. Local wild-life sanctuaries—where located, provisions concerning them.
3. The life and work of Jack Miner.
4. The Kellogg Sanctuary.
5. Tagging of game and its purpose.
6. Predatory animals of Michigan—types, numbers, locations.
7. Beaver in Michigan.
8. Song birds of the locality and their value.

Posters Express Children's Ideas

To go into detail on these matters would have taken much more time than the class had available. Miss McAndrews, therefore, made it clear that no detailed oral report was expected. Where possible the committee made its report by means of posters.

The class nominated a special poster committee which had the responsibility for putting at least one poster before the class each day. Two such posters had already been exhibited. One of these showed a small boy who had caught an undersized fish. The fish was saying, "Be careful with me and I'll make you a whole meal some day." The other was not very artistically executed but it showed a starved looking pheas-

ant in a barren winter field, trying to peck through the snow crust. It bore the caption "Feed me."

Forest Fires Cause Serious Thought

One of the bulletin board committee members brought in a picture of a fawn which had been killed in a forest fire. A fire-warden (with a pump on his back) was bending over the body of the fawn. This was now shown to the class. The next morning Miss McAndrews came to school with two pictures which she had clipped from a magazine. One showed a wonderful sketch of woods with splendid trees, the other was a picture of waste land marked only by blackened stumps.

"I didn't know that we still had forest fires in Michigan," said Mary.

There was lively competition for a few moments as several children told their stories about fires and about the destruction these fires had caused. Two or three in the class had actually seen forest fires while others shared the stories they had heard their parents tell.

"Yes, we have far too many," Miss McAndrews remarked by way of summary. "Suppose you try to find out the number of acres that were burned over in Michigan last year."

Mary Builds a Campfire, and Puts It Out

Some of the pupils had been in the fire regions and were able to tell something about fire towers and fire lines. One boy even told the class how the men at watch in the fire towers locate fires.

"How do all these fires get started?" asked one pupil.

A girl scout quickly answered, "Carelessness causes most of them. Many people do not know how to build a proper fire."

"Suppose you start an imaginary fire right here,

Mary, showing us just how a fire is correctly made," said Miss McAndrews.

"All right," said Mary, "I learned in camp how to start it and also how to put it out."

As Mary built her imaginary fire she told the class how to select a suitable place for a fire, how to light it, and how to extinguish the burning coals.

The Benefits of Trees and Plant Life Are Investigated

One of the most interesting of all discussions came on "test day." Miss McAndrews distributed paper and announced that they were to have a new kind of test—a test for which there would be no grades. She asked each pupil to make a list of all the benefits which he received from trees and other plant life. After ten minutes the lists were compared and a new and complete list placed on the blackboard. Quite interested debate followed regarding effects of plant life upon erosion, and upon the much disputed question of relationship to climate and rainfall.

On the school grounds was a fairly large grove of trees of various kinds. An identification and census was made of those trees. One boy made a fine map of a part of this grove with the trees and shrubs correctly located and labeled. Several pupils had discovered in their readings that seedling trees could be secured rather cheaply from the state nurseries. One presented the idea of getting some of these for planting on the school ground. This seemed a fine idea to the class.

The Planning Commission Begins Its Work

"Where would we plant them?" asked one pupil. Several places were suggested but the matter was left finally to a planning commission which had the job of making a completed map plan of the school grounds with the proposed uses of the various sections indi-

cated. Miss McAndrews had seen a "land utilization map" at the Fair some years ago. This map indicated the various uses of the land, including its uses for:

- a.* agriculture
- b.* lumbering
- c.* waste land
- d.* mineral lands, etc.

When this was done the class really had a land utilization map that included on a small scale many of the utilizations of land in general. Miss McAndrews asked for some volunteers to make a similar map of a near-by section of the city. To do this the committee, with Miss McAndrews' aid, first made a list of possible land uses, such as residential, commercial, industrial, agricultural, grazing, and forest. The pupils had some argument about mining but as they knew that there were no mines in the town, they let that matter drop.

They decided to use different colors on their map to indicate the different uses. They added a color for land not used at all. Miss McAndrews had wondered about the use of land for grazing but they surprised her by finding one vacant lot where a pet goat was tethered.

The committee got into another argument over a small swamp area. One boy insisted that it really wasn't correct to call it idle land for many birds made their homes in its cover. He said the swampy places really were valuable.

At the outer edge of the section of the city which they surveyed was a rather large field of quite sandy soil. They gave it the recreational color because it was used for scrub football games.

The teacher asked why that field was not planted to corn as another one on the other side of the area had been. "Corn wouldn't grow there, nor anything else but sand burrs," said John Wallace, the farm boy. He went on to say that his father had a field about like that one and couldn't grow anything on it. "I

guess I'll get dad to plant some of these fine seedlings we have been talking about."

The class took time to refer to the Highway Department map of Michigan which had been placed in the front of the room on the bulletin board and had attracted the attention of the class. One of the pupils who had been camping near Houghton Lake the previous summer volunteered to tell about the farms in that locality.

"There wasn't much farming," he said, "but there were lots of hotels and camps, and large woods. People go up there to camp and to fish, and in the fall to hunt. They come from all over to do this. We saw nearly as many Ohio and Indiana licenses as Michigan, I guess."

At this point the teacher attempted to answer the pupils' questions about the geological history of Michigan, explaining the influences upon present day soil conditions of the ancient lake areas and of the glaciers which at one time pushed their way down from the north.

Recreational Opportunities Are Not Forgotten

They had been talking about summer vacations when Miss McAndrews told them of her camping experience in Bear Mountain Park, the beautiful interstate park on the Hudson River above New York City. She told them about the many provisions for wholesome recreation which this one park provided. Then she told them about some of the other provisions made for recreation by the governmental agencies—the playgrounds and parks in New York City, the provisions for swimming in the Atlantic Ocean, the beauties of the Palisades preserved along the New Jersey shore of the Hudson River, et cetera.

Following this discussion it was suggested that each pupil prepare in written form a list of recreational facilities provided in Michigan by the various govern-

mental units. This information was secured from maps, booklets, and reports, but particularly from interviews with parents, public officials, and others. After the lists of each pupil were brought together in composite form, a further step was recommended. It was suggested that a list be prepared of all the ways in which the community might increase the available recreational facilities and thus enrich the leisure hours of the total community. The result was a most interesting list of needed parks, playgrounds, camping provisions sufficient for all who wish to camp, hunting areas, better provision for swimming and fishing, highways which could be beautified, et cetera.

An Evaluation Is Made of Conservation Programs

It was soon after this discussion of recreational provisions that one of the boys disturbed the peace of mind of the other boys and girls with an inquiry. "My dad says he can't see why the taxpayers' money should be paid for such things. He didn't have parks and playgrounds when he was a boy." His question gave an opportunity for a very interesting activity. Miss McAndrews suggested that they try to arrive at a really fair answer to this question by making an investigation of the cost and the benefits of conservation activities in the state. First they made a list of all the activities of a conservation character which are conducted within the state by the various agencies.

Following the preparation of this list a second was prepared to parallel it. This second list was an enumeration of all of the benefits which the children could discover which are the result of the various phases of the conservation program. The teacher urged the members of the class to think particularly of the benefits which they and their own families had derived. They were surprised to find how quickly their lists grew as they thought of the results that had come from each

aspect of conservation. There was hardly one aspect of their life which had not benefited in some way.

AN OLD LUMBER-JACK TELLS THEM A STORY

Johnny Harris' grandfather had been a lumber-jack in earlier days, and Johnny had learned much from him about Michigan history. Miss McAndrews suggested to the class that they invite the old gentleman to visit them and tell of his experiences. He told them how the settlers had come early in the last century to the farm lands in the southern part of the state. These first farmers cleared the land and usually burned the trees that were left after they had used what they needed for houses, fences, and corduroy roads. By the time of the Civil War Michigan was fairly well cleared and settled. After the war there came the development of manufacturing and of the cities of the state.

"Michigan and Wisconsin," Mr. Harris said, "had just what those cities needed for building material—plenty of fine pine trees and rivers running from the pine regions to harbors on Lake Michigan or Lake Huron. Pine logs will float easily and the lumberjacks came in great gangs and cut down the trees and "drove" the logs down to sawmill towns like Muskegon and Saginaw. If you wish to get the story of this, read Stewart Edward White's book "The Blazed Trail" or "The Riverman," by the same author.

"All this activity meant prosperity for the whole north section of lower Michigan and the upper Peninsula too, but it did not last long. By the time the first World's Fair was held at Chicago in 1893 the Michigan forests were almost gone."

"What happened then?" asked Mary Smith.

"At first some of the men who worked as lumber-jacks tried to farm the land but most of them did not succeed and soon abandoned the lands. Many lumber companies who owned the land did not bother to pay

their taxes, and by 1900, a huge acreage of this land was owned by the state. Efforts were made to pass the land out to people who would own it, farm it, and pay taxes, but farming just didn't pay. People would work hard for a few years and then abandon the farms."

Miss McAndrews then entered into the discussion and asked the children who had seen such regions to tell about the abandoned farms. "Of course," one of them said, "there were stretches where we saw many pretty good farms."

"Yes, and right near here, I know of four abandoned farms," said John Wallace. "The crops don't pay the farmers for their hard work."

"That is true," said Miss McAndrews. "There are lots of farms around here that won't pay for themselves even in the best of times."

"What happened to the land when the farmers left it?" asked Mary Smith.

"The abandoned farms have been added to the great mass of idle land," the old lumberjack told them. "Beginning about twenty-five years ago people became alarmed about the cutting of the forests. Wood was becoming very scarce and costly and people began to plant forests to create a future supply. Many trees were planted and the national government as well as the state government established forests in Michigan."

After Mr. Harris left, one of the boys called the attention of the class to the Michigan highway map which was hanging at the front of the room. The various state and national forests were clearly marked on this map.

The map did not help them to locate the other lands now owned by the state but the class members made an investigation of the total number of acres so owned. They also speculated to some extent about what the ownership situation would be in a few years when land

would again revert to the state for non-payment of taxes.

Miss McAndrews told the pupils something of the work of the Land Economic Survey of the State Conservation Department, a work which was temporarily discontinued in 1933. This survey was conducted on a highly scientific basis and undertook to analyze for economic possibilities all of the land in entire counties.

A Debate Raises New Questions

A debate was suggested on the question "Resolved that Michigan should sell the trees from the state forests when they become ready for sale." Six pupils volunteered to take part in this debate. It was really fun although the children took it very seriously and it brought out rather clearly the recreational and aesthetic values of "unspoiled nature." This debate served to call attention again to the value of parks. The class had come to think of the social as well as the personal benefits derived from public places of access to rivers, lakes, and woods. Miss McAndrews thought, however, that her pupils should know something of the number, location, extent, and variety of Michigan's public parks.

The class started with a survey of the parks (including the town's river park and tourist camp) that were located within a twenty-five mile radius. They went for a picnic after school to a nearby state park. The conservation officer in charge was able to give them much information about the state park system as well as information about conservation work in general.

When the boys and girls returned to the classroom the next day they began the hour's work by locating these parks on the highway maps. After this had been done they were divided into three groups for imaginary camping trips. Each was provided with a map on which to trace its imaginary travels. One group went to the Upper peninsula, a second covered the

west coast of Lake Michigan, first going south to visit the Irish Hills section. The third headed for Port Huron and followed the shore of Lake Huron north to Mackinaw. All the parties returned home through the central part of the state. One used U.S. 131 and the two others started south on U.S. 27, the other going east toward West Branch. As they went along on these imaginary journeys each group made notes of the things of a conservation interest which they would have been able to see had they really taken the trips.

The teacher called the attention of the pupils to the variety of interesting things to be found in the state parks. This class made a list of possible points to be observed in the individual parks, such as:

Picnic grounds

Access to beaches

Camping

Access to fishing, rivers, and lakes

Sand dunes

Forests, splendid trees

Wild-life

Unusual natural features

Historic interests

After each item in this list the pupils placed the name of a park that surpassed in this feature.

MICHIGAN'S SUB-SOIL RESOURCES ARE INVESTIGATED

The imaginary trips served to arouse interest in an entirely different type of natural resource from those previously investigated by the class. In noting points of interest along the routes the pupils often mentioned mines, coal-pits, salt and oil wells, and other things of similar character. These resources differ from plant and animal life in that when they are once consumed they cannot be replaced by human effort. This makes the conservation of such resources of particular importance when viewed from the standpoint of the needs of

future generations. The class in informal discussion made a rapid survey of the sub-soil resources of the state. Secondly, Miss McAndrews, by a series of questions, called attention to the fact that these resources were a part of nature's gift to the people and that the general public has an interest in their wise use. One of the boys mentioned the fact that his father had bought some state-owned property and although he owned the land now, he did not own the oil rights. Miss McAndrews explained the state policy of protecting the public rights in mineral wealth that might be found on state-owned lands whether these lands were retained or sold.

THE MANY USES OF WATER

There was one element of our natural resources that had been touched upon many times in the consideration of other matters but which had not received detailed consideration by the class. That element was "water."

The class first discussed the various ways in which water was used locally. They found that water was used in their town for drinking, cleaning, swimming, fishing, boating, irrigating lawns, and for carrying away waste. This last use led to a discussion of stream pollution. Consideration was then given to some of the uses of water in other parts of the state; for power, commercial fishing, and navigation.

As the class was about to conclude its discussion of waters, Norma Bruce raised her hand. When Miss McAndrews asked her what she wanted, she said, "I think that we have left out the best value of all."

"Of what were you thinking?" asked Miss McAndrews.

"To me rivers and lakes are worthwhile just for themselves."

"What do you mean?"

"I mean they are worthwhile just to look at, because they are beautiful."

And so with a discussion of the value of the "beauty of unspoiled nature" the class completed its journey into the field of natural resources.

THE PUPILS GIVE AN ASSEMBLY FOR THE SCHOOL

Some classes and some teachers become so interested in conservation that they wish to transmit to the school some of their own enthusiasm. Miss McAndrews and her pupils used three of the weekly school assemblies for this purpose. For the final assembly one of the pupils wrote a short play patterned after the case-discussion method which told of the four boys on a fishing trip. Following the play three pupils talked on "What Junior High School Students Can Do to Preserve our Natural Resources." This assembly was a great success and it made a very fine climax for the work on conservation.

Chapter 9

GROUP AND INDIVIDUAL DEVELOPMENT

Educational Gain Is Change in Human Personality

We are far too prone to appraise school life by examining its outer display. We look upon some exercise in arithmetic and call it good. We are proud when the spelling paper is correct and dismayed if too many words are wrong. We admire the colorful works of paint or clay. We rejoice when the singing is sweet and low. We look at the material product and call it good, and so it may be. But it is of far greater importance to look deep within the life of the pupil who has performed this task, made this thing. What has been its result in him? This is the supreme value. This is the constant care of the teacher, the hidden thing which must be reckoned with. What has this action done to the actor? Has it freed him or bound him up? Has it developed his powers of harming or of helping himself and others? What is the back action of this conduct on the learner? What is the residue within his personality? Has it left him weaker or stronger?

No teacher ever really becomes skillful who does not master the habit of focusing not on what a pupil does but on what that does to him. This is true not only of children but equally of adults. Many a student has won a Phi Beta Kappa key by shriveling himself up, withdrawing from his social responsibility, and learning as a slave rather than as a free man. Fortunately, it is not always so, for there are some who do well because they do all things well. Successful action has become a habit, and wide experience and participation in the life of community and school have

made him automatically wise. Excellent is the college which has provided such opportunity. It may be proud that its program of action is so broad and full that the residue of experience is strong men, well disposed.

Growth of Personality

Good teaching means the teacher's constant awareness of healthy growth in the pupil. The pupil's action reveals his self, what he is like. The child's composition tells its tale of the inner life; the drawing reveals tenseness or relaxation; the task carefully performed, with efficiency, reveals the well-balanced individual. The teacher is always ready to praise the unselfish response, to encourage the tired or discouraged, to welcome the individual's improvement, and to rejoice with one who has had victory over himself. For in all these things the teacher discovers desirable growth. What has happened has been a strengthening of the inner man, which is the true result of a good education. It is this that we mean when we speak of growth of personality, for this is the projection of good conduct into the future of the race.

Ways in Which Good Teaching Makes Good People

If the process of personality development is to be consciously furthered by teachers, they must recognize the way in which school conduct contributes to it. There are numerous ways in which the type of teaching described in these pages should bring about the life growth which teachers seek.

1. *Good Teaching Frees Initiative.* It should be quite clear that the kind of teaching described here awakens individuals, and inevitably trains them to take a hand in their own affairs and in the affairs of the world around them. Initiative is encouraged when it is accepted. On the other hand, in the midst of arbitrary rules, regulations, directions, and requirements it languishes. It is for this reason that pupils are given the opportunity to select experi-

ences. Small children may choose whether to play with blocks or to work with poster paints. High school students should pick out some experiment to demonstrate a scientific matter which interests them. College students should bring in geological specimens for exhibit and classification, and begin to make and classify their own collections.

Initiative is encouraged or discouraged continually by teachers who accept or reject the responses of their pupils. If the many things which children bring into school—dolls, animals, pictures, natural specimens, and even their small brothers and sisters—are accepted and related to what is going on in school, the children continue to be alert, and to know that what seems worth while to them has true significance.

Older students will, if their contributions are well received, constantly bring in items they have discovered which are of interest to the class. They will bring in objects, ideas, and books. In fact, a college teacher who is receptive will receive almost as many reading assignments from his students as he gives to them. On one occasion, a college teacher who was looking for a written guide to a series of scientific experiments for students to demonstrate in a particular class secured it from a student who found such a book in a bookstore and brought it in. This student's initiative was rewarded when he found that the book was used by successive classes for many years.

Mature students will often bring in their stories, poems, and written philosophies to teachers who will read them. Many a student is freed from his inhibitions in writing by finding that his teacher enjoys what he has done. Teachers need to be in a constant state of receptivity. A new idea, a proposal for a trip, a suggestion that some plan be abandoned, a new plan of action—all should be sympathetically received, and acted upon when possible. Tremendous flexibility and a very active program are essential, if individuals are to be trained in taking initiative in their own affairs and those of the community.

2. *Active Programs Train Pupils to Deal with Reality.* One of the most serious and common shortcomings in education is a breakdown between thought and action. This is education in a vacuum. The normal procedure in acting is to think out a thing and then carry it through. But a tremendous amount of education given in classes is merely a weighing of various courses of action, under conditions in which none of these courses can be followed. Students discuss the importance of freeing one country from the domination of another, making a decision that something they have no power to influence, or do, should be done. They study how an author got a superb effect, without themselves making any attempt to get any effect. They study a series of social reforms, and enlarge on their desirability in conditions under which they can do absolutely nothing to secure them.

True education keeps the line of thought-into-action wide open. If a pupil decides to make a book, he learns how to do it and does so. If he conceives of a form in clay, he makes it and has it fired and put to use. If he decides to raise hamsters or tropical fish, he secures the creatures themselves and equipment to care for them. It is only in such cases, when pupils decide what to do and actually do it, that the thought-into-action sequence is not broken. Only in such learning do they come into contact with a world that is more than a fancy—that is genuinely real. Control of reality comes through controlling it, not through merely talking about it and doing nothing further. This is just as true in dealing with people as it is in dealing with things.

The ability to get along well with other people does not come naturally. It must be learned. The realization of the rights of other people, and their equality with ourselves, comes only from mingling with them and working with them in common tasks. If pupils sit quietly while the teacher talks, there is no interaction between pupil and pupil. Opportunities for leadership do not come, and the

problems of dealing with the conduct of others do not arise. But if pupils are doing things and making things, they must constantly face the matter of adjusting themselves to others. If a child is making a table and needs a saw, his first impulse is to take it from another child who is using it. But if he does so, the other child will assert himself and resist. The teacher will show a better way, and advise the child to wait until the other has finished with the saw. So the first child learns not only to reckon with another, but how to avoid a quarrel and still get what he needs.

As students grow older, they need to carry on joint enterprises and work together with others. It is only in this way that they can learn to get the best out of a human situation. They can thus be taught that teasing, blaming, and quarreling impede the work in hand, and that praising, thanking, and encouraging all bring out the best in other human beings. So they discover reality not merely in things but in people, and learn to face human relations as they actually are.

So students *think* only when they find it necessary to *do*. If one would train pupils in thinking, he must give them opportunities to go on trips, to see many things, to touch them, talk about them, argue about them. He must let them make things of wood, clay, and of all kinds of materials, and read what will further their experiences, and write what will tell their thoughts. Furthermore, this law is just as true of older learners as it is of younger ones. High school and college students are just as starved as any others, if they are restricted to abstract and general situations. They too need programs of doing, acting, and making, on the level of concreteness, actuality, and materiality. They need larger and more daring experiences, such as publishing magazines, illustrating them, building houses, plotting the heavens on a map, operating businesses, exploring situations and their laws, painting pictures, and arranging exhibitions of their work. Growing older does not

change the conditions under which human beings learn to think, although it does increase their span of work. We all improve our thinking and learn to think for ourselves only when we are involved in situations which we consider vital. If we would learn to think, we must be involved in many tasks, and work jointly with many friends.

3. *A Good School Program Should Be Used to Develop Poise and Self-assurance.* The teacher should watch for every opportunity to develop in pupils poise and self-assurance. Pupils are often filled with timidity and a sense of inferiority. Gradually they should learn to banish such feelings and to stand solidly on their own feet. When pupils are involved in many tasks, and are able to observe that they have coped with them successfully and secured general approval, their feelings of lack gradually disappear.

Some of the most delicately organized individuals are those who feel the greatest inadequacies. They are sensitive to people, and to fine distinctions, and are more responsive than others to sensory stimuli and to matters of balance and proportion. A child whose picture is found attractive enough to be hung on the schoolroom wall and to secure expressions of enjoyment from others becomes immediately more confident. A student whose plot scheme is used as a basis for a pageant to be given by the group is very much strengthened, and will not hold back from similar tasks in the future. All authors know the timidity of their first works, and the encouragement which came with publication. It is a common experience of teachers in really good schools to see in early high school the blossoming out of gentle, beautiful, and timid children, who have at last found their powers, and have joyfully taken a new hold on life. As young manhood or womanhood approaches, they seem to bloom. The old fears and unfamiliarities are gone, and there is a fresh new confidence, a poised bearing, and a rhythm of accomplishment which stand as an unspoken seal of approval upon the school and its teachers. The teachers who have worked in unison through the years,

to help in the achievement of this superb result, are the first to give all credit to the boy or girl. But in their hearts they know that this is, to a large extent, a result of years of encouragement and acceptance of tasks timidly begun and enthusiastically received, of teacher-arranged situations in which success and approval came from companions and teachers. Routine teaching never secures such results. They only come when teachers watch individuals, and, knowing their needs, help students to fulfill them. It is one of the great triumphs of an active and busy school.

4. *Strong Character May Be Developed by the Observation of Cause and Effect in Real Situations.* The secret of character development is in the use of actual situations. The great worry of the self-conscious moralist, that schools do not develop character, is a needless bugaboo. There are some who claim that the prying moralist, who campaigns against supposed vile conditions, is spurred on by past guilt and inner inadequacy. However that may be, no good school need ever hesitate to claim that what is done there builds and strengthens the character of its pupils. Constant forbidding of action removes from students the experimental element which reinforces and validates all moral teaching. It is disaster in the wake of unwise conduct that reveals to us its unwisdom, and it is the success of our best endeavors which inspires us to reform and good living. Such things cannot be learned in the abstract. One of the great roles of the teacher is that of increasing the tempo of cause and effect, and in helping pupils who would overlook the result of their own action to contemplate it fairly and squarely.

This can only happen in a school or college where many things are going on. A student who rises to ask that a fellow student, who has said what was unacceptable to him, be forbidden to speak sees the point when he is himself forbidden to speak and is told that intolerance removes one's own rights together with those of others. A pupil who has idled at his workbook while others have completed their

examples may have to come early next morning to catch up. Cause and effect become apparent, and he will tend to learn that it is wiser to be diligent. When pupils are making, painting, holding meetings, selecting what they read, experimenting with musical instruments, and so on, they are able to see the cause-and-effect sequence in their own acts. They learn to trace the carry-through, to discover what is successful and worth while and what is destructive and harmful to all concerned. This may not alone make character, but it is the experience which may serve as the means to it. Generalizations outside one's own experience are of little help in building one's character. But when good and bad conduct can be generalized from one's own experience, it has a direct validity which cannot be denied. Such generalizations may be particularized into new situations with comparative ease. It cannot be said that one always chooses the cause-and-effect sequence which one knows to be right, but conviction is a great aid to conduct. A good program will not always make a student behave, but it will help him to behave himself.

5. *Active Programs Are Essential in Training Pupils to Use the Group Process.* The greatest shortage of the educational forms which have prevailed for centuries is that they have been too individual. Teachers have taught as if individuals always acted alone. This has produced a sort of social illiteracy, in which individuals are able to do things by themselves but are unable to work together unless they are driven by a boss, who issues the coordinating orders that all must follow. The time has now come when people must live and work in groups. This is one of the outstanding necessities of modern social development. We live in a society in which great strength is required of groups of men, if individuals are to live the good life and be strong in the face of disintegrative forces. So much is this so that it is necessary to give especially detailed attention to the nature of the group process and to how teachers can train students to live in it and by it.

The Group Process

Although it will always be necessary to teach individuals, and much learning, such as the ability to spell, is highly individual, there is another type of realization which can come only through training pupils in group living.

In outer appearance, a class always looks like a group, and if a group is merely a number of units joined mechanically by common presence in a single room, then this is indeed so. Such a group is like a bundle of sticks tied together by a string. It is a mere aggregation. Such a group is like a squad which can be put through its paces by a drillmaster. Instead of being strong, it is weak, for it can be subjected or hypnotized into action by a will outside itself. Such groups have no inner power, and are fit subjects for a dictator's purposes.

A true group in the human sense, however, is a very different thing. It is a constellation of human beings, each star moving in its own orbit by an inner power, yet each maintaining a relationship with the others which is such that they can act together. A group of human beings is capable of a greater dynamic than any force on earth. For it can be not merely the sum total of the inner strength and power of those who compose it, but something far greater than this, because all these powers are reinforced by the pattern of relationships which can be formed between them. In its simple manifestation this can be checked by observation. A group of children can build a playhouse in a way in which the uncoordinated members could never do such a thing. A union is far more powerful than its members could be working by themselves in their own interests.

The discovery of the group as a teaching instrument is very recent in the history of mankind. It has been deliberately and consciously used in this way only for a few decades, and only by a few teachers. It is still in its tentative and experimental stage, and up to the present is al-

most entirely missing in schooling above the elementary level. High schools and colleges have been virtually untouched by it, for they continue in the use of methods which are almost entirely individual. Consequently, the proper development of the group and its use as a teaching instrument and a social phenomenon are still chiefly of the future. It is the big new thing in education, in schools and in colleges. It is a great dynamic that can shake the future, when knowledge of its use becomes fully developed and the techniques and methods concerned are discovered, understood, and widely used. In that day new forces can sweep the earth, and we must earnestly hope and work that they may be good forces, for the healing of nations and people.

In the meanwhile, teachers should begin to learn the techniques of group living and group teaching. The first of these is the formation of a group itself. For a number of students brought together by the circumstances of school grouping are not yet a unified group.

Creating a Class Group

1. *Common Experience.* The enjoyment together of a series of attractive and worth-while experiences is one of the soundest ways of unifying a group. Nothing brings a group into better early intimacy than eating together. The ceremonial nature of eating together with other human beings is very old in the human race. It has been recognized in many cultures, such as those of China and India, and has often been surrounded with customs and taboos. It has not always been put to constructive social use, but it may be put to such a use if it becomes a means of bringing the individuals of a class group into friendly relationship with one another. Thus a picnic, a class luncheon, or a party, worked out on some pattern acceptable to all, can have excellent results. From the point of view of those who regard teaching as an individual process, little that can be regarded as learning goes on under such circumstances. They

are inclined not to recognize it as a sound schooltime activity, but to think of it rather as a supplementary affair, held for sentimental or amusement purposes. This is to overlook its group function of welding students together in a working intimacy and a group consciousness. Children are friable and mix easily, so that they do not observe the effect of such a familiar activity much beyond saying that they had a good time, recalling the experience with glee. But older students frequently remark on the nature of a group experience in eating together, saying that it has produced an entirely new atmosphere in the group, making acquaintances into friends. There is a magic in eating together which teachers will find well worth a trial.

Other forms of common experience are most useful in binding individuals into a group. A trip taken together, if carefully used, can aid much in this direction. Such a trip is best if it is partially planned together. Perhaps a trip to the docks has been suggested, while another pupil suggests a trip to see the Indian exhibit at the museum. A college class in New York, choosing between the Frick Museum and the Museum of Non-Objective Art, decided to visit both, with interesting results.

Trips may have widely varying objectives. They are usually made to some place which has a relation to the special work of the group, so that a history class may visit a historical site or shrine, while a science group may go to a science museum. Factories, clinics, hospitals, schools, courts, and churches, as well as many other places, may be chosen for a visit. But, whatever the objective, such a trip is usually looked forward to, provided trips are not taken too frequently. When trips are too frequent, or become too much a routine, they are not always welcome. But as long as they are vital and significant, they are valued.

Much of the unifying effect of a trip comes from what happens afterward. The response is not immediate, and usually takes a day or two to mature. But when the class returns to the subject, and a discussion of the experience

follows, it is always fruitful both as a means of drawing the group together and as a lead into other experiences which are commonly understood because they are on a common base. The conversation, the written work, and the art work of individuals are often affected. In some cases groups even write the story of their trip which, if mimeographed, can be taken home and shared with others, and so have a wider unifying effect.

2. *The Development of Mood or Atmosphere.* Not merely the special experiences of the group but their daily life together should be capitalized on as common experience. Gradually a teacher may build within the group a consciousness of kind, a realization of a group selfhood, a sense of oneness and belonging. This is partly done by the use of such phrases as our class, our work, our trip, our pictures, our newspaper. Pride can be developed in the way in which this particular group faces its problems and solves them, in the way the members behave, and in the way they do the class housekeeping and carry out its special activities. In the course of conferences and class discussions, the teacher can help the students make analyses of the way in which they have accomplished so much that is worth while. The causes of weakness in the group process and the effect of individual shortcomings may receive comment, usually of a diagnostic character without the attachment of blame. Gradually pupils can be given an insight into the nature of the group process and the value to each of them of a group which works well together. They can come to realize how a group functions, what its weaknesses and strengths are, how to obtain the strength desired, and the remarkable nature of the result attained by a group which is loyal to itself and works hard and patiently to an end. Thus a college class which contributed of its time and energy, while a foundation took a moving picture of the class group at work, was rewarded for its patience and co-operation when the picture, in which they had acted so well, was widely shown.

It is not possible to give in detail all the devices and schemes which a teacher can use to unify a group and to create in it a unique mood and atmosphere. Few teachers, hitherto, have had such a goal. But the time is coming when it will be used as a common criterion of good teaching, in classes from kindergarten to university. Civilization is in deep need of groups which are efficient, effective, and conscious of their own ability to take over a joint task and perform it well.

3. *A Survey of the Personal Resources of Each Member of the Group.* Techniques must be devised by means of which a group may become aware of the special abilities of the individuals within it, and so be able to put these abilities into use in the service of the group. This is almost unexplored territory, and the waste of human resources which results from this failure of human beings to realize themselves is greater than any waste of mineral and material resources the race has ever been guilty of. Human groups are almost universally dominated by a structure formed from without, which disregards the functional nature of the human units involved. It is thought sufficient to explore a subject turned over to a group by random comment, directed by the clumsy processes of parliamentary procedure. Parliamentary procedure is a primitive process devised to keep in order groups of individuals who have not passed beyond the process of individualization. The time is still before the human race when it will assign tasks to groups which will dispassionately work out the tasks given them by the use of the personal talents and resources of those who are members of the group. Here personal prestige or private politics is not the issue. The concern of the group is rather the public service to be provided by the most effective execution of the task at hand.

Techniques for talent and ability surveys still have to be worked out. One of the simplest that has found use up to the present is a brief autobiography technique. In one use of this technique, each member of a class was given a

large filing card and asked to write on it a brief story of his life in terms of his own unique accomplishments and abilities. The cards were then read by the teacher and also by a student who made a report on the class as a special group in terms of the actual reported characteristics of individuals. In the college classes in which this technique was used, the richness of background and ability was so startling that it revealed the serious inadequacy of the one-hour class period to make use of what was available. Experienced actors, musicians, and writers were discovered, and the hidden ambitions laid bare revealed how far the college was falling short, first in estimating the powers already resident in its pupils, and then in preparing them to grow from where they already were to what they hoped to become.

It is possible that psychological procedures for the personality survey may some time be perfected and standardized. For the present, amateur questionnaires may be devised and simple records invented. When this is done, it will become clear that teaching techniques virtually never used before will be needed to meet the wealth of individual ability that is revealed. A much improved group process must soon be devised by means of which our hitherto squandered group assets can be exploited in the cause of learning and living.

4. *Developing Leadership by Means of Group Life.* One of the characteristics of good group life is that it requires leadership. Yet there is a tremendous shortage of good leaders everywhere. This is because such leaders are not being trained, and they do not develop naturally.

Individuals become the leaders of groups in many ways. Leadership may be assumed, by a person who desires power, simply by the process of taking it. When such a person sees his advantage he just takes over a group, preaches to them whatever doctrine will give him control, and proceeds to make use of the group for his own purposes. National and political life, as it has been exhibited through-

out the world for generations, has given ample evidence of this kind of leadership and its disastrous results. It sets up a hierarchy of group machinery, a bureaucracy or political machine which produces corruption and a corresponding degree of human slavery.

A leader may also be chosen by his group. But the process of selection reflects the strength or weakness of those who make the selection. This is what is meant by the common maxim that people deserve the kind of leader that they get. Vote by vote, individuals register their own integrity, or lack of it, at the polls, so that we never escape the necessity of the good life in the individual. It is often popularly supposed that good leadership, proceeding through good government, can produce the good life by regulation and decree. It is thought that the private behavior of the individual does not count, as long as a good leader is in power. This begs the question, because the individual votes in accordance with what he is; a corrupt people, seeking personal advantage at the expense of the group, will always vote for the leader who will give it to them. On the other hand, the person who has the ability and the desire to serve the best interests of all can be selected only by individuals who themselves think first of the welfare of others. Thus there is no side-stepping the responsibility of the individual in the selection of a leader. For by selecting bad leaders a group may, in the end, lose even the right to choose, and may come under the power of a dictator. Good choice of a leader is essential, if free choice is to continue. Freedom is maintained only at considerable cost, but when it is sold it fetches only thirty pieces of silver.

Schools provide the only opportunity we have to train good leaders. Throughout the school life of the individual, such training should be given in easy stages. In the earliest grades of school, children must be brought out of the state of complete individualism into the realization of the fact that there is such a thing as a group, that others too have a place in the world. In the middle grades, they need to

be able to observe the choice of a leader and the functioning of some sort of group machinery, and sense the value of organization in group life. In the upper elementary school, they must be faced with the problems of proper selection, and make a beginning at realizing that sound selection is important to their own well-being and the health of the whole group.

In secondary school, the real laboratory of group life is found. Here the disorderly forces of developing personality come up against the forces of law and order, and the struggle between good and bad leaders begins. Life in the secondary school should provide intensive training in the selection of leaders under controlled conditions, and the nature of leadership should come under sharp scrutiny by every individual. The cause-and-effect sequences which actually occur in the group life of the school should be laid bare, so that actual example may serve as a means of providing understanding before it is too late. The secondary school should function as a tryout for the full drama of adult group living.

In college, the practice of the secondary school should begin to bear fruit. Not only should college students show skill and distinction in group life, but they should be able to make considerable progress in the use of the group process on a high level. Growing historical and sociological consciousness should enable them to develop a sound political understanding. The subject matter of history and the pattern of current events should make it possible for them to trace out cause and effect in the living of human groups on the wider world scene. National and international movements should come under scrutiny, and human motivations should be understood. The right of the group should be understood in a higher sense, and the power drives of individuals and special minorities should be so laid bare that the symptoms of their behavior may be easily observed. The college graduate should have become so aware of the nature of desirable group life that he could never be any-

thing but conscious of the kind of leadership which he himself gives and of the kind given by others. Complete political literacy should be a standard quality of every college graduate.

The Class Conference as the Training Ground of Group Life

Generalities about leadership do not help much unless they are accompanied by actual group training. The class conference is the real training ground on which a program of desirable group living must be worked out. From the earliest school days until education has been completed in the university, the class conference, in some form, extended or brief, must be a functional part of class life. To remove it, and substitute authority even on the highest levels, is to invite power leadership in the later life of the area concerned. Medical associations, school and college administrations, and church hierarchies are not immune from this state of affairs. We sacrifice the group process only at the price of power leadership.

The Nature of the Conference

What is the nature of the business which a class meeting or conference is called upon to deal with? This business, and the extent of it, varies greatly with the maturity of the students, but it has certain elements which run through every level in varying degree.

One of the first of these is the matter of *curriculum*. The consent of the learner is always necessary in teaching. Pupils should always be brought to the point of conscious consent to the proposed curriculum if they are to pursue its values earnestly. Thus, in all classes, it is necessary to hold early conferences until teacher and pupils see eye to eye about what they are proposing to do. There should be no particular difficulty about this, since proposed curriculum is always partially fitted to the learner for whom it is proposed. Either it has been formulated on the basis of past experiences with learners of this type, or the learners have

selected this class because it seems to them to meet some need they entertain. In either case, a conference involves a facing of what is to be done and a comradely agreement between pupils and teacher that this is what is ahead. A mere authoritarian announcement of what must be learned is not enough. It may seem to save time, but it wastes energy. The time spent by a teacher with a class in a patient checking-through with pupils, on any level, pays good dividends, because it convinces the class that the teacher is well aware of their needs and is willing to make any adaptations which special individual needs and circumstances may require.

In the course of a long period in school, students learn that all teachers are not equally considerate or reliable. An early conference in which it becomes clear that the teacher recognizes the all-human nature of his class relieves strain, builds confidence, and unifies the group in its focus upon what is about to be done. This focus is sharpened if the curriculum is reduced to cameo form and written out clearly in words. The form need not be that of the professional curriculum. It may be couched in everyday terms, and be a simple list of what the class hopes to do. Such a term plan, or list of proposed activities, may be enlarged and posted, or simply recorded by a secretary or kept in notebooks. If it is posted, it serves as a clear procedure, which may be checked off until its final completion gives the group a sense of completed accomplishment.

Teacher-Pupil Planning. Once a series of proposed activities has been listed, conferences of the teacher with the group become a continual necessity. Each new activity requires a conference, and each step in an activity may require planning and replanning. Only when this is done by the whole group is full advantage taken of contributions from all the members of the group. It is surprising how much better a group may work out a complex operation than any single individual, even the teacher. So it is that pupil-teacher planning makes groups aware of their own

strength and reveals a technique by which the contributions of all may be utilized.

Group Business. All groups have some group business to transact. Matters of attendance, of notices from the administration, of the securing of textbooks, notebooks, and supplies, of announcements and reports to the group from individual members, of information discovered by one which should be shared by all—these require time and something in the nature of a group business meeting. Much of this can be passed over by the teacher and administered by a group secretary or leader of some kind. Such simple situations should not be overlooked as a means to group training and the development of group leadership. All learners should be, at some time, placed in a leadership relationship to the group, so that each person awakens to the fact that all human beings are potential leaders, and that each should assume leadership in appropriate places and at appropriate times.

Leadership Selection and Executive Machinery. The whole group must sit in conference frequently on matters of internal business. One of the foremost of these is selecting leaders and setting the time span of their leadership. Both formal and informal methods of selection may be used from time to time. Certainly some form of choice must be worked out, whether an election is used or not. It may be preferred to elect a president, secretary, or treasurer. Perhaps these offices may be held in rotation. On the other hand, when many class posts have to be filled, one for each member of the class, it is often better to permit individuals to make a functional choice. It is surprising to find that when twenty functional tasks, such as historian and librarian, are offered to a group of twenty students, a first and second choice written on a slip of paper by each individual will scatter the individuals so widely through the various tasks that only a few will not be able to have first or second choice. If a final rule is made that no one will be compelled to serve in a post he does not want, a few substitu-

tions and further changes will result in a group happily assigned to actions which they enjoy. This functional use of a group is a revelation to some, for it awakens them for the first time to the realization that the group process has a functional place for talents, interests, and abilities of every kind.

It is such procedures as these which give individuals an insight into the way in which the functional life of a group should proceed. It reveals the true technique of leading a group, and makes the members of the group strong in the realization that group leadership is a public responsibility, not a private power grab. Citizens trained in such a fashion will make the kind of leaders that are truly needed to build a healthy society.

When specialized work must be done for a group, the appointment of a *committee* is indicated. A committee is a small group of workers serving the larger group in a delegated task. Thus it is clear that a committee should not be appointed to do things which can be better done by the whole group or by an individual member of the group. It is obvious that a committee cannot learn for a group. Teachers sometimes make the mistake of appointing committees on subject-matter learning. The idea seems to be that a complex subject can be broken down, one committee learning one part, another committee another. At other times an individual is asked to learn a fundamental area and report to the class on the area. This is improper procedure, although a "committee of one" may study a secondary area, a bypath which is not of interest to all, and tell the group the results of his special exploration.

A committee may be appointed to make plans for such an activity as a class luncheon, or to explore further suggestions given for a group activity, or to work with the committee of another class on a joint art exhibit which is projected. Committees may work in class time or out of it, as the nature of the situation indicates.

Committees Need to Be Trained

It is a mistake to assume that committees know how to function without training. One need only attend a committee meeting of adults in school or college work to discover that the average committee is a clumsy affair. Students must be taught that they must recognize an appointed or selected chairman. The chairman should know that it is his duty to keep the group actively and constructively at work. A committee chairman should do his utmost to secure the fullest participation and contribution from each member of the committee, and should make his own suggestions merely a normal part of the whole.

It is most advisable for the chairman to put the findings of the committee in writing or have a secretary do so. The written form is by far the most economical in reporting back to the group. The report should be made as soon as possible, the written form of the report being shown to the teacher in advance, if possible. This gives the teacher an opportunity to think ahead of the class, to some extent, and make constructive changes if they are needed. A committee report does not, in any way, bind a class to follow its suggestions, but, when the report is made, the class can take whatever action it approves. However, it is seldom necessary to send a thing back to committee in teaching, for the needed modifications can be made on the floor, and the action can be decided upon. The purpose of committees in teaching is somewhat different from that in public bodies where public responsibility makes procedure of special importance. The procedure in teaching may always be modified in terms of the major value of desirable learning situations.

How to Hold a Conference in Class

The holding of a good class conference is a complex operation, and great skill is required if the most is to be made of it. It should be regularly scheduled, as frequently as

circumstances indicate the need of it, probably daily. Some definite form of announcement should be used, one of the best of which is to write it into the day's program, as written on the blackboard. The following elements require attention.

Leadership. At times the teacher may conduct the conference, but with older students it is desirable that a member of the class act as leader. Thus, whoever is acting as the class leader or coordinator at the time may automatically take over. This is one of the best opportunities for the development of skill in leadership which a class affords. The qualities of good leadership should be discussed by the class, when advisable, and listed. Further than this, the teacher should note the performance of each individual who acts as leader, and in private discussion give the proper kind of encouragement and constructive criticism with respect to voice usage, enunciation, poise, bearing, analysis and use of the pupils' responses, and whatever matters will build up the skill and confidence of the leader.

Organization. The leader should learn to make use of the class organization in administering the program. Thus the secretary's report should be called for from the person who is responsible for it. If a trip secretary had been appointed, the leader would call upon the trip secretary if any matter concerning a proposed trip should come up.

Problems. During a class conference, problems frequently arise. These may range from a question as to what materials can be used to make a roof for the proposed post office to how the members of the class may best contribute to the writing of the class history. It may be that in such matters the teacher, who is present and watching group progress, will step in if the group flounders. Sometimes it requires the expert direction of the teacher to avoid quibbling, waste of time, or failure of insight. Student leadership is not always sufficiently mature for the needs of a group. Whenever this begins to show up the teacher must take over.

Discussions. Student leaders may sometimes direct class discussions. On the other hand, a serious and important discussion usually demands the expert skill of the teacher. It is in such matters that the scholarship and mental grasp of the teacher is most required. In fact, many teachers often fail to develop that acumen and brilliance which a good discussion leader needs. Rapid analysis of student responses is necessary, and often considerable sympathetic ability in attempting to understand what a student's meaning is when clothed in inexpert and inaccurate language. Again, skill in recognizing the typical weaknesses which creep into a discussion is needed.

A good temper, a smiling countenance, and lots of humor are important qualifications for a good discussion leader. He needs to be tolerant and gentle toward individuals, but firm in ruling out irrelevancies and in enforcing time limits. A teacher can easily enforce even a difficult ruling if it is accompanied by an agreeable laugh.

Implementation of Group Decisions

The primary result of the group process is action. Conference, deliberation, and discussion all lead to this outcome. Only by carrying through to the full implementation of what has been decided upon can the unfortunate breakdown between thought and action be avoided. What the group has decided upon must be done. It thus happens that a class which is really directed in a healthy form of the group process will soon be involved in an extensive program of activities. For a group is mainly concerned with what its joint powers can accomplish, not merely with what the group thinks. Group thinking is not the goal of the group process. Group thinking is a futile thing. An attempt to secure group agreement as to which Shakespeare play is the best would not merely be impossible, but would have no value or significance if it were secured.

On the other hand, agreement among a group that selections from the best written work of the class should be ar-

ranged, mimeographed, and distributed does have meaning. When such a decision has been made, an element of the class program has been determined. The class must then proceed to carry out the decision. It must be planned and executed on time as a part of the class work. Thus it comes about that a class makes its own program. The teacher stands by and directs affairs, so that the elements of the curriculum are involved in the total program. The class members are active participants in deciding just what things shall be done and how to go about them. It is in this fashion that education becomes more than talking and listening. It is in this way that pupils become involved in such things as making a sailboat, sending off a Christmas parcel, producing a song festival, printing a newspaper, presenting a historical pageant, holding an art exhibit, carrying on a small business, taking a trip to a neighboring mining town, building a camp site, speculating on the stock market, keeping an aviary, stocking a fish pool, giving a radio program, presenting a class play on a television set.

It is remarkable to contemplate the way in which this kind of education is changing the texture of adult society. In communities where the young have been trained to participation, they much more readily find a place where they can make a social contribution, and they enter into community living with a vim and vigor which make the people concerned the most dynamic in the world. The training of students to live by the group process makes them more than individuals. It makes them important contributors to the well-being of all, and true servants of the people.

Group Fulfillment Is Its Own Reward

The unity which comes to a group when the members have successfully completed a group task is a source of great satisfaction to those concerned. There is much joy in individual and personal achievement, but work carried to a successful completion with a group brings a very different kind of pleasure. Individual accomplishment is so

small in its sweep, and so limited to oneself, that it is relatively narrow.^a But the accomplishments of a group are so sensational, so grand in their scope, and so impressive, that their very largeness of dimension gives the individuals concerned a pride which is all the more wholesome because it includes others along with oneself. It results in the development of group standards and in the realization that efficient, cooperative groups can make social gains which have hitherto been impossible. It builds a dislike of corruption and infidelity in public places, and tends toward supplying the community with superior public servants. For once having tasted the fruits of cooperation, individuals will be loath to give them up. They will be the more willing to establish and work with social groups, which can offer something worth while to the larger community. The final result of sound training in the group process would be a richer and a better world.

Chapter 10

MOUNTING THE LESSON

No matter how deeply teachers are concerned with their pupils and how fully they must learn to think from the learner's point of view, they must also think from their own. There is a teacher view of a class program, and it is this which is continually before the teacher in day-to-day planning and preparation. To put the matter in a good old-fashioned way, the teacher must be concerned with the *lesson*.

The concept of the lesson has suffered neglect for some time. Turning away from the notion that portions of subject matter, called lessons, were marked out to be learned in set blocks at set times, some have revolted against the very notion of the lesson. Yet if there is no lesson, nothing is learned, as has often been the case in some classrooms. The lesson must not be thought of in the restrictive framework of a specific portion of "subject matter to be learned in a given period of time." Rather must the lesson be conceived in a more flexible, pliable, long-drawn-out sense. The concept of specific learning and definite value and content must remain, but the circumstances and time of learning must be adapted to special conditions and suitable times. The overall notion of method and technique must come in, so that lessons must not disappear, but appear in more intriguing and more irresistible forms.

In actual practice the learning sequence of a good class proceeds with so much flow and movement that teacher and pupil seem hardly conscious of the passage of time. Events merge with one another, like the sequences of a moving

picture. They are not sharply bounded by time periods, or interrupted like a television program by the extraneous propaganda of advertisements. It is for this reason that the short periods of high school and college are being replaced by longer periods of two or three hours, in which a flexible sequence of events, with less rigid timing, is made possible.

Types of Lessons

But in spite of this sense of wholeness and natural order which makes a class period seem relatively undivided and a continuous whole, teachers need to be conscious of different situations. Analysis is always too sharp for the real situation, but it is valuable because it brings action into order and focus. Consequently, it is worth while to attempt to recognize certain typical situations which recur throughout all teaching. In this sense it could be said that there are different types of lessons, which might be described as follows:

1. Programs of full pupil self-activity
2. Concerted group action
3. Self-directed study
4. Conference
5. The long crosscutting activity
6. Group on the main pattern, individuals on personal activities
7. Blending and overlapping of group and individual activities
8. Trips and visits
9. Prearranged programs
10. Individual instruction
11. Group instruction by the teacher
12. Pupil instruction and pupil reporting
13. The demonstration
14. The new idea

If a teacher is thoroughly familiar with all these typical situations and knows how to guide them, it is possible to

follow through from the daily program, using whatever type of method is required by the part of the program being entered upon. Thus the practical problem of deciding just how to conduct a lesson may be intelligently worked out both in preplanning and in planning on the floor. It has often been thought that teachers can make complex intellectual analyses of method in preplanning lessons. If this type of intellectual analysis and planning is required of teachers, they will tend to force through a lesson plan as preplanned. Actually, teachers plan differently, if left to themselves. Relatively little preplanning in terms of method is done. Teachers note *what the class will probably do*. This will give some inkling of method. But much of the method analysis will be made on the floor, just as the new activity of the program is being launched. Teachers familiar with all the basic situations will make a quick analysis as the new part of the program begins, a revision which takes in all the special circumstances of the moment. Unless this is so, the teacher will tend to follow a routine, featuring only one or two possibilities, such as questioning and lecturing, with discussion thrown in to pad the time intervals. To teach in this fashion, in elementary school, high school, or college, is to fail in the imaginative appreciation of some of the best possibilities for promoting learning.

1. *Programs of Full Pupil Self-activity*. One of the most satisfactory types of lessons is that in which pupils are so thoroughly self-active that it looks as though the teacher had nothing to do—were left, for the time, unemployed. For instance, a third grade will come into the classroom and set to work, even if the teacher is not present. A parent who comes in to confer with the teacher may find the teacher out of the room conferring with another teacher on some aspect of program. Coming into the room, without a word to the class, the teacher may begin to talk to the parent. The individual members are all at work by the time the bell rings. Several have selected books from the shelf and are reading, two are cutting papers to a certain size

for a book cover, others are making illustrations for work written the day before. The whole class is busy, and will have to be interrupted when a change of program is due. A high school class may similarly begin work on entering a classroom. A college class may be called to order by the student chairman, and the activities of the day set in motion. Part of the art of teaching lies in not interfering in the pupil's learning process. In teaching, to retreat is often as masterly a strategy as to advance.

2. *Concerted Group Action.* There are times when the success of an enterprise depends upon the merging of the self into the group. In singing a song, or in working in a choral-speaking group, the essence of success is for all to work as one, producing, as it were, a group self. One member of the group, often the teacher, acts as a director, and by signals and silent communication indicates the rhythm, tempo, mood, and expression to be followed. There may be times with any group, young or old, when a superb literary passage is so worth while that its repetition in concert is indicated. For example, "The love of freedom is the love of others, the love of power is the love of oneself" might be spoken aloud so that it might be better noted and committed to memory.

3. *Self-directed Study.* In a sense, self-directed study is a part of the larger whole of full pupil self-activity. But for practical purposes it needs to be sharply distinguished from it, lest teachers fall into the trap of giving up the one for the other. Both are necessary on all levels of teaching except the very youngest level. After the earliest years, school time should be provided for children to work alone on reading, spelling, and, as they get older, content material. As students become more mature, the amount of reading and study which must be done gradually increases, until in college and university it becomes extensive. With the increase in the amount of self-directed study that is required, much of this study must be done out of class. But in all teaching two aspects of good direction should always be observed.

a. Some of the class time (although not in every period) should be occupied with self-directed study. For example, few college classes can soundly proceed without the early coverage of a basic text which establishes the essential informational learnings of the field. If a study week is instituted very near the beginning of the term, in which the class text is read in and out of class under careful teacher direction and checking, something may be accomplished that is accomplished in not more than a smattering of classes—the basic text would be read by virtually every student. With bright classes, and a term still to run, this would make examinations almost unnecessary. In such a study week the teacher is always present and able to take up special problems and hold private interviews with students during class time. Some teachers secure a written interview from each student, and after reading the interviews arrange special personal talks, while the study work is in progress, with those who need them. Self-directed study (sometimes called supervised study) is an important part of high school work, since it helps remove from students a burden of out-of-class study which is almost too severe for many of them to bear. Home conditions are often distracting, and even impossible, so that in-school study under guidance and supervision should be a major form of activity in secondary schools.

b. Study materials should be thoroughly worth while and include complete skilled directions. Workbooks accomplish this in elementary schools. To some extent this is also true of secondary school work. But carefully written teacher direction is needed for both high school and college students if school or home study is to be properly directed.

It should be noted that, if adequate direction is to be given to school and home study, meticulous and full directions should be given in writing, either from mimeographed study guides or by dictation during the assignment. The briefer and sketchier the directions given, the poorer they usually are. Only through detailed directions can student

effort be conserved for the individual and for the class. Study assignments should make clear what students should look for in the assignment, both generally and specifically, and indicate just where they may find it. Questions and suggestions for special observation and for reflection, or for special practice, are needed. When no workbook is available, a worthy substitute for it should be used, reflecting the teaching skill and ingenuity of the high school or college teacher. Much of the ingenuity now used in preparing examinations should be expended instead on the preparation of first-rate materials for guiding students in study.

4. *Conference.* The technique of the conference has been discussed elsewhere in this book, from the point of view of its use as a teaching device. It is also worthy of notice as a type of lesson in itself. In its more primitive forms it has always held a place, since the time of Socrates, as questioning and discussion. In its more active form it is more than this. Many a lesson lasting for half an hour or more is simply a conference (*a*) to explore a new proposal, (*b*) to remedy a situation which is not as good as it should be, (*c*) to advance a program already well under way, (*d*) to explore a thought or a point of view read or spoken, (*e*) to answer a question asked by pupil or teacher, or (*f*) to round out a special experience which has been completed. Examples of the above would occur if (*a*) a class in sociology suggested a trip to Ellis Island, (*b*) water pistols were being brought to class in a fifth grade, (*c*) a playhouse being built needed furnishings, (*d*) a paragraph from one of Bacon's essays was read and proved suggestive, (*e*) a pupil asked what causes dew or a teacher inquired what causes fluctuations in foreign exchange, and (*f*) a visit to an exhibit of contemporary art precipitated a controversy.

In directing a conference, the teacher must be careful to see that every person who wishes to do so has a chance to speak, and that each idea is welcomed and treated with consideration. Potent responses rather than futile ones must be encouraged, and the whole molded so skillfully that a

consensus is reached without using time which would be better spent in action. This requires no mean ability on the part of a teacher. Such teaching is a challenge to one's best abilities. Relatively few teachers ever attain the finish required to conduct a really good lesson of the conference type, even though this type of lesson is perhaps the most universal of all, and is an essential part of all teaching through the highest reaches of the university. Unfortunately, this type of teaching is sometimes called the *group method*, as if it were a method of teaching. It is merely a basic technique to be used with many others to round out a teaching program.

5. *The Long Crosscutting Activity.* Lessons in sequence are not discrete unities like a string of pearls or of popcorn. Lessons are part of a developmental sequence, a growth, and that growth is related to the total developing life pattern of the individual learner. Thus it happens that strong, dominating motifs run through the longer process of teaching. Not merely do day-by-day incidents occur, but events take place which gather together by association and begin to gain momentum, to broaden out and increase their scope as the days pass. Such larger activities have been somewhat clumsily called *units*, or more descriptively, *units of activity*. But whatever the verbiage used, the reality requiring identification is the event which starts small and grows large, the current which becomes stronger as the stream flows further, the thing which holds a larger focus so that it progresses from day to day, crosscutting smaller affairs and including them, until finally completion is attained. Such events are organic, because they begin with a seed and grow into a treelike complex of acts which finds fulfillment and fruitfulness in learning.

Such is a general description of organic, or crosscutting, activities. In practice they appear in many forms. Small children plan a picnic and after days of preparation it takes place. Older children find they have so many notes to write that they build a post office and use it for many days. Mid-

dle-grade children plan a happy town and build it on the floor. Older children organize an imaginary trip to the moon, or give a play based on the legend of the tired soldiers who made soup of stones and so persuaded the stingy villagers to add meat and vegetables and give them a feast (see frontispiece). Young people charter a bus and take a trip to the United Nations Assembly, college students plan a radio program and give it over a local station, or organize an afterschool play program for children in underprivileged neighborhoods. Such long-time, crosscutting acts go on parallel with the more regularly scheduled ones. They accompany the less ambitious parts of the program, and develop out of the special desires and plans of the group. They vary from term to term, from class to class, and so have freshness and originality. They are not a substitute for the rest of the program, but they develop from that program. They constantly border on and include and belong with the other things that are going on. An imaginary trip around the world, for example, would involve reading, writing, studying, map work, drawing, figuring of costs, and many of the less exciting aspects of a regular program. They act both as a motivator of the standard program and as a fulfillment of it. They provide the school day with the elements of drama, interest, and the personal fulfillment which makes living real.

This kind of lesson is harmonized and merged with the more regularly scheduled program, by the use of the conference and the daily program. The daily program is a day-by-day integration of all aspects of the class program in terms of the specific amount of time available and of the special needs of the day, priority being given to what is most pressing and essential. Thus no confusion can arise, since the events of life are carefully arranged in terms of one another. Educational literature is full of accounts of such crosscutting activities, which will reveal their nature if considered in terms of the description given here.

6. *Group on the Main Pattern, Individuals on Personal Activities.* It is not possible to conduct a complex program efficiently and keep all pupils busy at the same thing at the same time. Routine classroom procedures make a false overall assumption that all individuals can be kept busy on the same activities throughout the whole teaching period. To attempt to compel them to do so is to lose the tremendous asset which is provided the teacher by individual interests and momentary and hourly emotional changes. It frequently happens that some individuals finish the tasks assigned sooner than others. For example, some children are automatic spellers. That means that they learn to spell as they read, and so do not need to study spelling in anything but the most cursory fashion. Some children are rapid calculators, who finish their arithmetic in almost no time. Some pupils read so rapidly that they leave the slow readers behind. Furthermore, there is a tendency for pupils who are rapid in one thing to be rapid in others, so that some students complete the more restrictive parts of their program before others. Programing, therefore, demands that provision for additional activities be made for those who complete their work in less time than others. An easel for painting, a book table, a plan of calling on rapid students to do such special work for the class as arranging bulletin boards, making charts, or doing special work in the library—all these make it possible to arrange the class period in such a way that the main group is at work on a general task while individuals are quietly working at other things.

Care should be taken to see that the personal or individual activities are of a quiet nature when the general work of the group is of a quiet nature. If the group is on noisy work, then the individuals may also be relatively noisy. Care should also be taken to see that children are not absent from the group when instruction is being given that is to be shared by all. Thus a teacher giving a science demonstration with a magnet and iron filings would be wise enough not to have several children painting at an easel or

absent in the library while the demonstration and discussion are under way. Individual deviations from group program have to be carefully arranged by some scheme of general agreement on when to leave the group, or by individual conference and permission. This makes it possible for individual children to do personal things, such as working on a butterfly collection or making a badly needed poster, while others are at work on regular tasks.

Sometimes some conflict arises because a job must be done by an individual and must be done right away, although the individual concerned should not miss the general class proceedings. A book of illustrations may suddenly be needed, although its use was unexpected, and a student must be sent for it. Cookies to be eaten before the class disbands must be started immediately if they are to be done in time. A student is asked for by another teacher to tell a story or relate some special incident concerning a recent trip out of the city. When these conflicts occur they must be solved by the use of whatever ingenuity the teacher can use. They do occur in every complex program, and their absence would merely indicate that the class was rather a dull place.

7. Blending and Overlapping of Group and Individual Activities. There is a class situation which appears to be something of a melee, whereas in reality it is perfectly orderly and efficient, a class busily at work. No class should always seem to be thus uncentered. But the apparent uncentering, when the situation is sound, is merely due to the fact that each individual or small group is its own center, and is engaged on a task which does not appear to be related to the whole program, but which is actually so related. For example, it is convenient to begin the school day with young children by having the room arranged for many automatically challenging activities on which children set to work as soon as they arrive. There are blocks, parallel bars, easels, tables, paper and crayon, perhaps clay. By the time all the children have arrived and set to work, painting, building, or playing house with dolls and toys, the room

appears most active indeed. The teacher stands by to help with this and that, to talk to individuals, and to mediate conflicts. Actually the room which appears disorderly is orderly, because each pupil is engaged on something that seems worth while. The inner orderliness is shown, later on, when a single chord on the piano causes the children to put their work away and a second chord brings them quietly to the feet of the teacher for a still period.

A similar period of apparently uncentered activity can occur among older students in a class which is nearing the time for the rehearsal of a play. This situation can occur with children or grownups, near a term end, when any pageant, play, or fair is projected. When the time comes to give up routine activities, the teacher may check to ask if everyone knows what to do. Individuals who are not sure then hold a conference with the teacher. The others break up and proceed to various tasks. Some individuals may work on bits of scenery, several others may join together to review a bit of script, while the director may call another group for rehearsal. In the meanwhile, some who have nothing pressing in the matter of the play may do something entirely different—writing, studying, or working with a committee, perhaps in another room, on a matter entirely different from the play, such as an editorial problem on a school newspaper. Thus individual and group activities of many sorts, although they appear to be unrelated, are actually related under the surface in an orderly class.

A similar scene is enacted when a class is concerned with an art program or a crafts program on any level, including the college. Since various arts and crafts, or at least individual art projects in a single medium like water color, are under way, each takes up his own work. The class gives a diverse appearance, but each individual is busy either alone or receiving individual direction or help from the teacher.

8. *Trips and Visits.* Taking a trip or making a visit upsets the whole routine of the class, and introduces conditions far different from the seclusion of the classroom. Young

students must be under the careful direction and supervision of the teacher, who often recruits parent assistants. Parent permission must be obtained for the trip, and clear and definite plans must be made for travel to and from the spot visited. This may be merely a nearby lake shore, or a far-distant museum or factory. College students, on the other hand, may make their trip together, in small groups, or each traveling alone.

The general disruption of the rest of the program makes it desirable that this type of lesson be not too frequent, probably not in excess of three times a term, and perhaps less. There are many reasons for such trips. In the first place, a common binding experience, in a special area, may be desirable in the beginning of a term. Again, studies under way may indicate a special need for a visit, as in a case where pupils interested in Indians visit an Indian exhibit. Or the visit may be because of intrinsic values found at a special place outside the school. Thus adult students may visit a dance program or a theater performance of some classic, or visit a specialized art exhibit or a public institution.

In almost every case, trips and visits are not complete learning experiences in and by themselves. They must proceed out of or into other aspects of the program if they are to be worth while. Thus a trip to further knowledge of how bread is made may be useful, whereas a visit to a science museum can scarcely yield full value unless there is follow-up in discussion study and performance. Trips are seldom learning assets unless the teacher makes them so.

9. *Prearranged Programs.* There is one type of lesson in which the teacher, although present, is virtually a non-participant. Such lessons require much care and preparation in their arrangement and scheduling. It often happens that a moving picture can give a class experiences which could be obtained in no other way. Such films as those which portray the life of the bee, an expedition to Alaska, a safari through Africa, or the structure and care of the eye and

ear obviously bring to the classroom benefits which could come in no other way. Special performances by ballad singers, shadow players, a symphony orchestra, a lecturer on scientific or natural subjects—all can make invaluable contributions. Even the casual lecturer, the visitor returned from another country, the author reading from his own work, or the storyteller extraordinary may make contributions which will be long remembered. Such enrichment of the class program differs from most other things done because it is inflexible. It must be prepared for well in advance and be rigidly scheduled. Its full use and bearing cannot be estimated until it is over, but it is usually worth while in itself, and it is often a relatively complete experience.

10. *Individual Instruction.* Individual interviews and special instruction for single students are among the high lights of a good teaching program. No program in elementary school, high school, or college is adequate unless it affords opportunity for especially needed work with individuals. This can only take place when the teacher does not continuously occupy himself with the group. The holding of special interviews with individuals, in time not scheduled, is a generous gesture, but at the same time a confession of the failure of the teacher's general method. If lessons of all the types described here are used at one time or another, teachers will have no difficulty in setting aside times for special individual attention. In a well-directed class, there are times when the teacher's absence from the classroom is not even noticed, because of the busy self-occupation of the students. During such times students may come to the teacher for personal help or discussion. Private conversation and special direction or assistance may be given either in the classroom, in the corridor, or in a nearby room. Praise, encouragement, appreciation, advice, and special help may all be given. Lessons of this kind are among the most valuable and significant of all, and teaching which makes them possible is skillful teaching indeed. Help given at such times is usually potent.

11. *Group Instruction by the Teacher.* In all classes, group instruction by the teacher is important. The older the pupils, the more of it is appropriate. A well-prepared lecture is one of the finest kinds of college teaching, when the content is a special adaptation of special material, brilliantly selected, and organized by a superior person. There is even a warranty, under special circumstances, for a series of such lectures, in the case of exceptionally capable lecturers who have had unusual experiences and special opportunities. But such cases are not common, and the average teacher in high school or college could do his students nothing but injustice by limiting his class work to mere lecture and discussion.

Nevertheless, even in a program fully organized in terms of every type of lesson described here, there are frequent occasions when direct group instruction is necessary. Whatever the area, the greater knowledge, experience, and maturity of the teacher in that area make it necessary that he give skillful, organized instruction. Teachers in an elementary school may need to show pupils how to learn their spelling words, how to deal with a type of arithmetic problem, how to make a book binding. High school teachers may need to explain how soaps are made and why they work, to point out the main causes of social unrest, or to suggest what makes a good plot for a short story. College teachers may need to point up the causes of Browning's seeming obscurity or the nature of Tennyson's mystic experience, explore the phenomenon of the periodic table, or show the unifying effect of field theory in biology, physics, and chemistry. But whenever direct instruction is given, it should not be a cover-up for lack of more complex methods. It should be given because it is the most direct method of helping the student to incorporate the learnings concerned into his learning total.

12. *Pupil Instruction and Pupil Reporting.* One of the most valuable skills a mature individual can acquire is that of being able to stand before a group of other persons and challenge their interest and attention. This skill is slowly

learned through the years. By the time the pupil has left the elementary school, he should be able to stand before others without fear, and present materials interestingly and effectively. In high school this skill should be developed to a level of direct efficiency. College students should be so skillful in the use of this ability that they are capable of presenting their personal interests and investigations by the use of special and wide vocabulary.

There are none of us who do not take a natural interest in making collections, putting together materials, or investigating topics which are significant to us personally. So throughout school and college, students should continually be carrying on personal projects, widening their knowledge through the study of topics which they select because of direct personal interest. Development of the students demands that they have frequent opportunity to present to an audience an account of what they have done. Even if such opportunities are given throughout the whole school career of the individual, there will not be too many of them, for if each student is to have his turn, not more than three or four opportunities a year are likely to occur, and in the total of a school career, this is not very many.

Good teaching, however, requires a nice balance between the work done by the pupils and that done by the teacher. One is not a substitute for the other. The student lecture or report must have a personal element, in the sense that it is a part of himself. It is given as much for the experience which the pupil gains in giving it as for the content. It does not meet the same need as a skillful presentation by an able teacher, nor is the student, in his awakening knowledge, able to give a lesson nearly as potent as one by the teacher. Too much student reporting is banal. Unless its level is kept high by a constant setting up and reviewing of standards, it will be dull. Whenever it is used, its use must be limited in time and frequency, and it must be so organized that there is a personal drive in student interest behind

every presentation. Good reporting from students is not easy to secure, and bad reporting is worse than none.

13. *The Demonstration.* Demonstrations may be given by both students and teachers. Both types of demonstrations follow similar lines, but student demonstrations are less skillful and only suitable for the special case of supplementing a scheduled report.

Teacher demonstration is most frequently required in the science area. The following schedule of suggestions indicates some of the procedures which make for a good experimental demonstration in science.

PRESENTING AN EXPERIMENT IN AN ELEMENTARY SCHOOL CLASS

(For example: A glass of water is covered by a card and inverted over a basin.)

1. There should be preliminary exploration of the life experience of the children upon which the experiment is to throw light. A problem may or may not be raised, as suits the case.

2. The experiment to be performed should be tested before it is used in class so that it will go smoothly.

3. The experiment should be performed where all can see it.

4. As much pupil aid should be used in the demonstration as is practicable.

5. The pupils should be told briefly what is to be done, and told just where to focus attention, although *not* told what will happen.

6. Pupils should be asked to describe clearly in words what happened at the point of focus.

7. A period of pupil thinking should occur, in which the children should attempt to explain, in their terms, what caused the phenomenon. This thinking period is one of the most important parts of the total experience.

8. With the aid of the teacher a clear principle should be derived as a generalization. This should be written on the board, in notebooks, or somewhere. It might be added to a list of such generalizations on a chart.

9. A series of applications in the child's experience or behavior should be discussed by the pupils and supplemented by the teacher.

10. Subsequent lessons may well begin with discussion of applications of previous learnings the children have made in the interim since the lessons were taught.

11. The new learnings should be tied into a nexus of other life knowledge already learned so that the science outcomes will not be a mere set of isolated generalizations, but a broadened understanding of a set of inter-related events demonstrating an orderly and ordered universe which operates under law.

12. When practicable, the experimental materials should be left where pupils may repeat the experiment, one at a time, in some orderly way, in free time.

14. *The New Idea.* In an active class which has gotten well under way, and in which many interesting things are beginning to happen, sooner or later a new idea will appear. It will come without warning, and will present a situation without precedent. How to receive and use it becomes an instantaneous dilemma.

A class which has worked out its complete plan to the end of the term may suddenly receive an invitation from another class to join with it in producing a final revue based on the work of the term. The class may suddenly acquire a phonograph and may wish to hear some recordings the very thought of which has hitherto been rejected. An invitation may suddenly come from a nearby school to make them a visit. An idea for a play or a bulletin-board exhibit may suddenly appear, or a student may bring in a piece of poetry which suggests a whole dance performance. Each

case above has actually occurred in college teaching, and each led to a modification of the program and a valuable experience. Such things occur with equal dramatic effect in the elementary school, as in one case where a first grade suddenly received a box of oranges from a parent visiting in Florida. The box was made into an improvised train, which hauled its load on an imaginary trip from Florida. When it had duly arrived two oranges were given to each pupil, one eaten on the spot and the other taken home for later delectation.

Such new ideas or fresh occurrences cannot be planned for in advance. All a teacher can do is to be prepared for their occurrence and be ready to turn them into assets, if at all possible. The old way was to say "no." But to waste the explosion of enthusiasm which always comes with the new suggestion or the sensational occurrence is usually wrong. There is one exception. If the occurrence takes place late in the term, and its scope is such that its completion on time is out of the question, it must be unhappily vetoed, and for this reason. Otherwise it is better to face the upset, call a meeting, revise class plans, and use the heaven-sent opportunity for all that it is worth. In a class willing to pay this price, life will never be dull.

Some General Considerations Concerning Method

Types of Lessons Usually Blend with One Another. Any such description as that given above is only a partial description of teaching. Things do not occur in splendid isolation, all prearranged by a kind providence into this situation or that, demanding some pure type of teaching which is just the right thing. The pure cases do not occur more than half the time, if that often. A class program is a blending and intermixing of these situations in every conceivable complex.

Thus it is that no preview of teaching methods can fully equip a teacher to carry on. The best that can be said is that if each teacher will try himself, in clear cases of specific

types, then the practice so obtained will equip him to make new combinations. Teaching is too elusive to be set down by exact formula. Nevertheless, skill in complex situations does not precede but follows skill in simple ones. In the end, a school period is an original. The techniques and the materials are similar, but the total experience is always unique.

Errors Are Inevitable. No matter how skillfully one may teach, the afterview always reveals that it might have been done better. One cannot afford to mourn one's errors, or the fact that every ideal has not been achieved or every goal reached. Even when an error seems, from the point of view of learning, calamitous, one must forgive oneself and try to do better next time. On one occasion, a graduate class planned a visit to a museum of modern art two weeks in advance. The class was to meet the teacher at the museum, at the time appointed for the regular meetings. The teacher had carefully checked the museum's program and special exhibit by himself, visiting it a week in advance and making accurate note of the circumstances. Yet when teacher and class arrived, they found that the weekly Monday closing had been arbitrarily continued into Tuesday to hang a new exhibit. The class was stranded. Perfection in a teacher might have demanded a telephone inquiry concerning the specific day involved, but he made the error of assuming that since regularly Tuesday was an open day then every Tuesday would be open. In such very unusual cases it is best to write off the loss until such a day as one has reached perfection. Worrying about it will not redeem the lost lesson.

Variety the Foundation of Method. In teaching, routine is deadly. It is like the letter of the law which killeth. Variety maketh alive. One of the standard mistakes of teachers is to discover "a method." It may be the latest pronouncement of some administration or of some textbook, or it may just be a discovery of the teacher himself. Perhaps, in the rosy glow of a remarkable success, a teacher decides that he has discovered the royal road to teaching, and once

and for all he adopts the new way, as a fixed routine for all time. This is to die as a teacher. For monotony inevitably creeps in. In nature, nothing repeats itself. Every aspect of growth is new, and each situation different from each which preceded it. So it is with teaching. One cannot adopt a single solution. Every type of lesson and every combination of every type are needed. And into it all must be introduced the continual change of an alert and living person, the events of the day and the year, the personal characteristics of the students, and the times in which they live. If variety were one's single method, that virtue alone would ensure success. It is perhaps the deepest secret of good teaching.

Chapter 11

THE SOCIAL MEANING OF TEACHING

Once upon a time, a school was an institution that met the needs of individuals but had small thought of any further service to the community. Gradually, however, the world has become increasingly conscious of its people. Political and social challenge have weighed in upon the school, and it has been forced to take account of pressures arising because of the affairs of majority and minority groups and because of the struggles of nations. Schools have become the battleground of the conflicting ideologies of those who profess to be working for fuller individual and social liberty. Powerful forces are at work for the control of schools, and there are many who see in schools the golden opportunity for affecting the destiny of men through group organization and group propaganda.

Much of the campaign stressing group life and community schools may not be entirely innocent of special efforts to bring schools into a special orbit of power. It is therefore of the utmost importance that this area be clarified and examined in terms of pure educational value. Certainly schools are coming under the influence of a movement for increased school and community relationship. Teachers are being called on to face the demand that the school be a prime mover on the social scene, an institution which serves not merely the individual but also the community.

Unfortunately, the movement toward school and community relationships has been demanded with greater vigor than it has been explained. It seems to have been promoted by obscure motivations and urged on schools by foggy

maxims and poorly supported demands. Teachers have been urged to build a new social order as if the blueprints were already at hand. They have listened to educators who have proclaimed social emergency and the need for desperate action, but who have left them quite bewildered as to what possible action they could take, either in their private lives or in special ways of teaching their classes. The grandiose nature of much that has been written and said, pleading with teachers to do something splendid, has often left them confused. To their own college teachers they have come with a pitiful plea for an explanation. They have been confused and disturbed by demands made upon them which they have no faint glimmering of how to fulfill. They have said, in effect, "I am only a teacher. If the heads of nations and the professional reformers don't know what to do about the state of the world, how should I? I am doing the best I know how to help my pupils solve their problems and live well. I am not trying to save the world, and my pupils are less eager to do it than I. If these very vocal educational leaders know how it is to be done, why don't they do it themselves and let my pupils wait a while, before being called on to solve the problems their elders are unable to deal with?" Certainly if such inquiring teachers are to make any progress in school and community relationships they need more than harangue and alarm.

Consequently, it may be well to consider some of the possible sources from which the demands for socialization of instruction proceed. A consideration and evaluation of these sources may make it easier to reach some simple understanding of what schools are really responsible for and what teachers can actually do in the matter.

Collectivism

There is a popular doctrine to the effect that individualism is a form of selfishness which has brought many troubles upon the world. Troubles of this type, it is said, would disappear, if collectivism were substituted for individualism,

because such a move would banish selfishness and its evil results. This argument is specious because it uses words that are different to separate concepts which are not mutually exclusive. If one once grants that collective action is more in the public good than individual action, he will always be struggling to get his pupils to act as a group instead of as individuals. He will feel that here is a social philosophy which may save the world, and will struggle to secure a group which is purged of individuals. The delusion of such thinkers, and there are many, is due to the failure to realize that groups are only individuals, and their weaknesses will combine to affect the decision and action of the group. Individual selfishness will become group selfishness, and individual sacrifice group sacrifice. Collectivism covers no multitude of sins, and it will solve no problems that are not first solved through individuals. He who would look to collectivism as a justification for school and community relationships will flounder forever. He becomes, like so many who are with us, a propagandist pure and simple, shouting from the housetops that we must, with dispatch, save the world by collective action. By so doing he may urge people into groups of individuals who, because they are without the will to act, soon fall under the hypnotic sway of men of power. The strong individual will thus subdue the weak. The road of this form of collectivism ends inevitably in dictatorship.

Social Control

First cousin to the collectivist is the individual who thinks of group life as a means of social control. But, unlike the collectivist, he does not show his hand. He regards his knowledge as the special possession of a controlling group, which must rule because of specially assigned power, or on account of greater ability or wisdom. To such leaders the formation of youth groups is essential. They are to be welded together by the allotment of special privilege and attractive program. Thus youth movements, sports

programs, pageants, and amusements are encouraged; these appear in the guise of group work and community service. Actually these groups are fodder for the propaganda machine. They not merely listen to propaganda but they carry it out, with all the enthusiasm of a football rally. Enterprises of this kind are frequently clothed in high-sounding phrases about group life, community service, and teacher participation in public life. Actually they are means toward social control, and their aim is not the freeing of communities but their enslavement. It is hoped to bring them into a condition of willing compliance, so that they will quickly obey the word of their master.

Teachers who respond to the cry for more community and school interaction, and for greater public service, need a better social philosophy than that provided by those who would use schools and teachers as a means to political ends. They cannot refrain from suspecting those who come to them urging a social program for the school without at the same time urging a kind of teacher who awakens individual power and initiative, a teacher who advocates a group life in which obeisance is not the major goal and in which the group strength is based on the awakening of the individual power of individuals. There are too many advocates of school and community relationships who urge their doctrines because they have ulterior motives of political domination, or because they are the confused dupes of such individuals, driven by a sentimental eagerness to do some good to somebody, but lacking the sharp intellectual perception required to penetrate the disguise of those who control them.

Tolerance

There are many social leaders who, realizing the unhappiness and injustice which come about through intolerance, feel that group interaction and interpenetration will help to break down the narrowness which produces intolerance of minorities. There is doubtless considerable truth in this.

Those who eat with forks find it hard to understand those who eat with their fingers or with chopsticks. But when these groups intermingle and learn to eat together with one another in friendly fashion, true human values emerge and greater kinship is recognized.

Thus the intermingling in school of groups whose ways are different, and the use of community excursions to cross the lines of social custom, have a broadening effect. When students witness public presentations of the dancers of Japan, China, Cambodia, India, Burma, and Spain, there is a cracking up of narrow concepts which comes without any verbal instruction whatever. College students who have the opportunity to witness such performances in the community or on the college campus learn much, and learn it quickly, about the community of peoples.

But the longing for tolerance is not alone enough to motivate a movement for school and community interchange. It may be the private reason of a few, but it is not an adequate justification for the many. Necessary as it is, tolerance is not a full and complete social philosophy. Furthermore, it is attained not merely by social means, but by individual action and individual development as well. Something more than the hope of tolerance is necessary to provide the sanction of a social program.

Peace

There is a vague feeling that war, being a strain between groups, can be eliminated if groups can learn to live together, using other techniques to solve their problems. Here is a much deeper and sounder philosophy on which to base one's plea for intergroup living. As one contemplates the world scene and observes the prevalence of group conflict, the force and ruin he discovers are dismaying. It is natural to wish that the strains between these power groups could be discharged by conference and agreement instead of by war or social sabotage. Thus arises the exalted hope that if small groups can be taught to live together and settle

their differences by peaceful means, then large groups may ultimately benefit by this experience and learn to settle their problems by peaceful arbitration.

There is something to be said for such a hope, and it is worth pursuing. Certainly the strains which exist between small groups are similar to those between large ones. But the hope is remote and somewhat visionary. It expects too much of too little. Yet it is in the right direction, and there can be no doubt about the fact that intergroup life in practice provides, better than pure abstractions, a basis for the understanding of peace and war.

A Wider Environment as a Base for Learning

One of the soundest pleas for school and community interaction is to be found in the evident need for a learning environment wider than the classroom. In other terms, this also means that mere teacher-pupil relationships in class are narrower than interindividual relationships which may occur in the same class. And again, the mingling of group with group, in class and school, increases not merely the sense data and the materials of teaching, but it also increases the complex of human relationships which the individual pupil is able to explore. Thus wider living provides wider experience and richer learning.

This superiority of the group arrangement for class living becomes apparent even in teaching small children. When a group of beginners breaks up in the morning, some will work with building blocks, some will play house, and others may plot out a miniature city on the floor. Had the children been held together, the teaching environment would have been much more simple, and not nearly so effective. Older pupils may break up into special committees for special work on a study of their own city. One group may make a chart showing the water system which serves the city, another, a chart outlining the city government and its services, while other groups work on the port authority, the health department, and so on. Thus a complex picture of

the city, as a good place to live in, might emerge by a pooling of the special studies. This is group work at its best, and teachers who are dismayed by elaborate demands of authorities for social participation and community education can congratulate themselves that in a simple way they are doing what is necessary without any more elaborate philosophy than is required by an active program directed by skilled teaching.

The use of the group process and the widening of the environment are the essence of socialized teaching. College teachers, whose views of teaching merely encompass a theoretical approach to their subject, can develop their teaching plan in practical fashion. This they can do if they will include in their thinking the wider community of the city and its larger environs. Ready for study are the geology of the environs, its living plants and animals, its current politics and government, its engineering projects in course of development, its churches, courts, colleges, and museums, its newspapers, its poetry society, its radio and theater programs. By bringing these within the horizon of student experience, a widening occurs which makes teaching more vital and more concrete. There will be no less book study, but rather more. For such directness serves well to lay bare social realities and to awaken social consciousness in a way which far exceeds the generally used method of merely reviewing social theories, sometimes presented with special coloration.

The School as a Social Agency

Teachers should never be so carried away with the claims of social education as to forget that all groups, and the community at large, thrive only when the education of the individual has been successful. Good individuals make good groups. Social education must be constantly administered in such a way that individuals are given unremitting and detailed attention. The school itself has a great service to

perform as a social center, which students regard as their home, and to which they can come seeking help in their problems. If schools are close enough to individuals, they can act as the clearinghouse for individual problems by establishing relationships with all the other agencies of social service. The following story is a fine example of what a school can do when it, too, becomes an active social agent.

SCHOOL HIS HAVEN ¹

"I had no other place to go!" Simple, direct—surely! He was dirty, tired, and so hungry. He had traveled so far that day and the day before, and the day before that.

Yes, South Carolina was a long way off. James had come all the way alone.

James had entered our school in 1943. His blond hair had been brushed back over his head so that the front of his hair reached the nape of his neck. He was tall for his age, dirty, unkempt, and undernourished.

His history was a long one. His father died as a result of injuries sustained in World War I. His mother remarried and bore six more children. The new husband did not live very long, and left James' mother with the care of a large family. She was not unkind, but she knew little of the proper care of children.

James day-dreamed through his classes constantly, gazing skyward at the airplanes passing by. Surprisingly enough, his joy knew no bounds when we chose him as one of the ghosts in Dickens' "Christmas Carol." He fitted the part perfectly.

His mother, too, was thrilled. She worked hard to make him a costume. We can still picture a tense, wide-eyed, drawn face peering out of a soiled sheet. His mother came to see him act. It was his first time on the

¹ Board of Education of the City of New York, Brooklyn, N.Y., "Bridges between the School and the Community," pp. 12 and 13.

stage. He was letter-perfect. We were all delighted. So was he.

But all things must follow their destiny. Fate had decreed that James again be wafted on the clouds of uncertainty. This time the mother was taking her brood to South Carolina to join her brother as a sharecropper. We bade James farewell.

A year had passed. The Memorial Day weekend holiday was at hand. Everyone was looking forward to a pleasant, though short, vacation. And then . . . an interruption! Our principal returned to the office to behold . . . a vagrant? A beggar? No . . . James! He had stumbled into her office, taller, thinner, weary, hungry, and oh, so sad!

His clothes were dirty and torn. All he owned was wrapped in the newspapers he carried. What a pitiful sight, exhausted, and hardly able to stand erect.

Haltingly he related his tale. Mother remarried; no place for him; no friends; unwanted; none to turn to save those who once found a place for him. It was worth hitchhiking for. It was worth taking the chance. It was worth days without food—to find a refuge.

He was placed in the custody of proper authorities. All was well.

School was his haven. He had found what he sought—understanding and assistance.

What Action Should Teachers Take in Building Bridges between School and Community?

When reduced to specific action, just what may the teacher be expected to do, if the standard of fine school and community relationships is to be secured? The teacher's contribution might be summarized as follows:

1. *Make Use of the Group Process.* The techniques of the group process have been fully discussed in earlier pages. The heart of the matter lies here. If the class itself is a functioning community, it becomes the practice ground for

understanding and directing community life, and for the training of individuals with initiative and character who can assume positions of leadership.

2. *The Use of a Widened Environment.* A. THE STUDY OF FOREIGN COMMUNITIES AND PEOPLES. Nothing can contribute more to the breakdown of isolation and narrowness than the discovery of another people. The people chosen may be any of the many groups which prove interesting to students. Once the group to be lived with is selected, the procedure to be used may be developed naturally from it. Young children approach such work through dolls, stories, or artifacts of the land chosen, such as Holland, Mexico, or China. Older students approach it through literature, economics, or government.

B. TRIPS INTO THE COMMUNITY. In addition to the kind of trip taken early in the term to bind a class together in a web of common experience, there is also the trip taken to widen environment and increase the data of experience. Trips are valued experiences for students at every level of learning, from childhood to maturity. Trips may be made into all available localities, as far afield as the situation makes feasible. A school situated in a New York suburb may range from the planetarium in the city to the reservation of the Audubon Society in the open country. Adult students may visit such specialized environments as a hospital for the mentally disturbed or a museum of modern art. The broadening of concepts so obtained serves as a motivation for whatever further study is under way.

C. INVITED SPEAKERS. In their own social life, teachers frequently meet specialists in the arts, crafts, or special occupations, or travelers just returned from foreign lands. By inviting them to lunch, the teachers can often combine their own personal social enjoyment with considerable service to their classes. Most people who have achieved something worth while are willing, when they have the time, to talk to students and provide them with exhibits, slides, or moving pictures which give that thrilling touch of personal ac-

tuality to learning. Sometimes students themselves have been recently in foreign lands, or their parents have just returned from travels abroad. In any case, invited speakers, who have something to offer, are appreciated both in colleges and in other schools.

D. COMMUNITY STUDIES. Community studies may range from a simple floor map of the neighborhood to a job survey, made by high school students, or an analysis of the social structure of a city or nation by college students. On the adult level, such community studies are of signal service to all concerned.

E. COMMUNITY SERVICE. Students get a considerable lift, and develop a real consciousness of their own social worth, when they are able to perform actual community service. Participation in drives for waste paper, for the Red Cross, or any public movement is a common contribution of the young. Older groups often prepare special gifts or entertainments for underprivileged or hospitalized children at Christmas. Mature students make contributions of books or clothing needed in special social crises at home or abroad. This awakening of students to the importance of personal contribution to the less fortunate or those in emergency need is an excellent means toward training in constructive citizenship.

The Community Response to the School

As the schools and colleges of a country emerge from the limitations of pioneering, their social contribution continually increases. It has long been true that the special values put into the curriculum of schools and colleges finally emerge in community life. The greatest roll of honor on which a man's name may be inscribed is the curriculum of the elementary school. The great thinkers and motivators on the world scene all have their place in the curriculum of college and university. So it is that, in natural operation, all schools have always been the true support of the community in which they are found.

But a wider and fuller sweep of community contribution is necessary as more complex social problems develop and men live in wider and wider groups, mingling more and more. This requires more expertness from teachers, and demands ever higher and higher types of personality in teaching positions. Thus there is a tendency for the status of the teacher to rise as the community contribution of the teacher becomes more extensive and more essential. The social status of the teacher is continually rising, and communities contribute more and more of their public funds to the support of schools and teachers' salaries. It is not too much to say that the long-projected rising curve of financial support for teachers, which will continue to rise for decades to come, will be in part a response to the increasing social contribution of the teachers themselves.

Chapter 12

CHECKING UP

The dread of examinations has been a burden of youth for generations. Unfortunately, there has been some academic pride in it, as if this state of affairs were a merit instead of a disgrace. The tension and fear that have accompanied the traditional examination period in high schools and colleges is inherited from a social situation which has largely disappeared into the past. It was a function of a highly competitive society which featured rugged individualism. This was part of a pioneering situation, one in which wealth had to be wrested from a resisting earth, so that there was not much time left for the development of the arts and graces.

This type of society has now passed away in all developed areas. Education is now no longer primarily competitive. This does not mean that healthy competition of a friendly type is not natural and useful in school life. The psychological stimulus of the competitive race is a universal human phenomenon. Many of us only do our best when we find ourselves involved in a brisk contest. Almost everybody enjoys a game. Therefore, teaching may often make use of this fact. It will be found that games enliven the drill in arithmetic, and a spelling match is a welcome diversion as a variant from the daily spelling routine. On the other hand, there is little doubt about the fact that lack of interest in competitive struggle is a mark of mature personality, and the creative individual never does his best in competition. To the creative person, the forming power of his vision

pushes him forward until it has been given outer shape and reality. The inner drive is alone enough, so that competition merely adds restrictions without increasing the inner drive. Thus it is clear that competition is more suitable to the muscle-driven young. The time for games is childhood and youth. The older the students and the more intellectually and emotionally mature they become, the less suitable are competitive methods of teaching. Thus the heavy-artillery type of examination becomes less of a teaching device, and more of a barrier to functional learning, as pupils become more mature and capable of learning things for their own sake.

No attempt is made to deny the fact that much of the operation of politics and business is highly competitive. In these areas the prize goes to the strong, and may go to the most unscrupulous. Yet from the point of view of teachers, this should not be so, and no ethical teacher will work to train his pupils to win by chicanery, brutality, moral compromise. To do so is to break the social contract. For teachers are as much concerned with society as with individuals, and nowhere is their social contribution more important than when they teach their pupils to attain personal good only by socially constructive means. It is not the duty of the school to use teaching methods which encourage pupils to attain success by internecine competition. The school must train individuals to good living, so that in competition merit will tell. Thus in competition many holds are barred, and all sport must be clean sport. So to the extent that severe competitive examinations are an injury to the emotional and moral life of individuals, they should be discarded. What competitive examinations remain should be such as further the learning process and do not tend to distort teaching.

From the point of view of education, it is clear that the function of all evaluation is to further learning. Whenever evaluation is made for any other purpose, it is distorted by

extraneous value. Thus one of the most pernicious effects of an elaborate examination system, such as that which prevails in many states and in many high schools and colleges, is a major injury to teaching. Whenever examinations become a supervisory device, tending to exert force on teachers to distort their methods of teaching, those systems are a social evil and should be abolished. When they are maintained, they are maintained by the exertion of private power and force, which is exercised by the few at the expense of the many. It is true that this power hides behind the most eminent appearance of respectability. This is true in high places of government systems and in universities of dignified architecture and academic prestige. Yet these systems should not deceive because they present a grand front. Their operations are evil, and their result is socially destructive. If they must continue to exist, they should discover methods of evaluation which will allow full freedom to schools and teachers to make teaching and learning the goal of their efforts, and let all evaluation come as an aid to learning and a fulfillment of teaching. Teachers should learn to teach right, and let evaluation look after itself when the time comes.

The Value of Evaluation

Evaluation is useful because it brings to the learner satisfaction and a consciousness of effort well spent. When one has spent much time and strength in any enterprise, he likes to assess his gain. Has the result been worth the struggle? Is what has been learned personally and socially valuable? It is the fulfilling of this need which should guide the teacher in all attempts at measuring the results of teaching. Thus evaluation becomes not a bugbear, but an actual part of teaching itself. Thus it can be satisfactory and frequently very enjoyable. When it is carried on in this fashion, evaluation may be a true aid and support to learning. It may take many of the forms suggested below.

Testing

The word *test* has received considerable distortion because of its frequent use by teachers as a sort of spur or whip. When pupils are unwilling to learn, to read, or to study, it is sometimes an indication of some poor adjustment in their personalities. More frequently, it indicates teaching methods which please the teacher but do not meet the needs of learners. It is a custom of some teachers, when they find that their students are not following orders, to give them periodic tests or examinations, covering units of work which have been assigned. The threat that the results of the test will be averaged into the final grade given students at the end of the term acts as a fear pressure. It often compels the students to learn the assigned material in a form which can be gotten up for the test and promptly forgotten when it is over. Thus a show of learning is substituted for the real thing. No learning is very real unless it meets a growth need of the person concerned. In the case of such tests, the growth need is that of passing the test, so that when the need is past the material is quickly forgotten.

The workings of the psychological mechanism are more sharp and subtle than the devices and schemes of teachers or pupils. They add up the assets and liabilities of learning as accurately as any cash register. False values quickly cancel out, leaving those who expect more than they have earned or learned with their true deserts. Thus there has been public complaint that students remember less of the high school history taught as seniors than they did as freshmen. It is mistakenly supposed that this is an exposé of students. It is actually a condemnation of teachers who have taught history of so little meaning and significance that only the laws of learning will be able to cast it up at its true value. Nonfunctional learning will always be promptly forgotten. On the other hand, the most worthless information

will be well remembered if there is a use for it. Witness the radio programs of quiz wizards.

Nevertheless the test, legitimately prepared and correctly given, is a definite asset in teaching. When the teaching has been functional and correct, several tests a term for older pupils help to put ideas in focus and make students conscious of the fact that there is a net progress in learning, and that step by step they are reaching the goals which they set up. Nor is it to be supposed that any teacher's teaching is ever perfect or entirely functional. The educative process is an inefficient process at best. Few teachers ever live up to their ideals, and much must be covered up by second-rate devices. One of the ways of meeting shortages and errors is the use of tests and examinations. If not overused, tests act as reminders that the best of us, students as well as teachers, can fall short of our best intentions. What we have postponed must be reckoned with, standards which we have set must be struggled for, and losses must be turned into gains. Character rises to meet a recognized neglect, and tests which come as time goals and reminders, especially if they are properly administered to minimize strain, can serve as healthy exercises and needed checks.

Avoidance of Strain during Test Periods

The administering of tests in such a way that consequent strain will not produce emotional disturbance or specific blocking is especially important with children. No matter how skillful the method of teaching, there will be children who, due to causes not understood or discovered or to causes out of control, will have special shortages in spelling, reading, arithmetic, or other areas. If such pupils are compelled to meet the standard tests of their compeers, whether those tests are formal, informal, or standardized, serious results always occur. Such children should not be required to face such tests. They should be given special tests or special treatment until remedial work or maturity brings them up

to a standard of reasonable success. If they score a no-performance result, they are likely to come under censure or ridicule which finally destroys their willingness to learn in the area concerned. Endless patience and long waiting, in such cases, will pay the only dividends that the situation will ever pay to anyone.

The following devices will assist teachers to prepare tests which do not cause undesirable strain or force false forms of learning.

1. Except in the case of standardized tests, the task required should not be longer or more difficult than can be accomplished in the time allotted.

2. The questions asked in the tests should often be general, requiring an answer which will differ according to the differing learning experience of the learners.

3. Tests should not be made to stump or downface learners. Teachers sometimes expand their own ego by preparing tests that will impress themselves or their colleagues and appear to keep up a standard of supposed scholarship. Such tests compel students to learn what they learn in nonfunctional form, which in turn produces early forgetting. One's mental content should not be a reference work of insignificant facts. One may always consult the textbook or the encyclopedia for such preserved data.

4. Tests should correspond to goal periods, about three a term. When a final grade is made up, the tests should be incorporated in them at face value. Thus a final examination or test should not carry a heavier weight than those at the end of each goal period. So strain is distributed, and the even quality of learning maintained. The postponement of the day of reckoning to a final hour is not lifelike. It does not work, because learning cannot be postponed, but must go on day in and day out. What has been neglected for months cannot be made up in days. The testing program should face this distribution of learning by a corresponding distribution of testing.

5. Tests should be given in a form which makes the test correspond, as much as possible, to functional usage. If the test cannot include action, then it should be an exercise in thinking. It should be couched in such terms as will make the pupil rearrange the learned data, ideas, and information in the way in which he would use them, or could use them in a life situation. Thus tests perform a useful exercise in integrative thinking, and teach pupils to assemble all their resources to the answering of a question or the solving of a problem. If tests cannot call for functional acting they must call for functional thinking.

6. The misuse of the true-false test and the short-answer test must be carefully avoided. This type of test is open to easy abuse, to the emphasis on catch questions and isolated bits of information. Unless teachers know how to avoid the misuse of objective or short-answer tests, they had better let them alone. They produce a show of learning without the substance. There can be little doubt that short-answer tests, as generally used, do more harm than good. They are more of a support to an examination system as a system than to learning or teaching. Only teachers of tremendous wisdom and keen consciousness of educational value, who will spend enormous amounts of time in preparing relatively sound tests, can produce tests which do not supervise or which destroy sound teaching procedures. In all probability, teachers who are wise enough to make up such tests will be too wise to use them.

Testing Can Be Both Informal and Formal

There is an informal type of testing which is of value in special situations. Some teachers devise simple test cards for each of the ten or fifteen books from which upper-grade children do their silent reading. These cards contain a few general informational questions, or a brief question about plot or characters. This helps to keep students on an even keel in their reading, so that they will not sacrifice speed to understanding or understanding to speed. When a pupil

finishes a book, he fills in the answers to the questions, and so gains a feeling of success if he has read properly. This is, however, a mere example. Teachers will find many uses for the informal test, used to assure the fact that a job has been well done.

When a unit of activity has been carried on, such as making a study of the newspapers of the community, dramatizing life in an African village, or investigating the uses of air pressure, all concerned may wish, as the activity is completed, to make an informal study of how much that is worth while has been learned. A special test devised for the occasion, directed not toward marking or grading the individual but toward improved learning and better understanding, can easily be prepared. This may be done by the teacher or by a committee. The results serve a further purpose of filling in crevices of worth-while meaning that have existed in the learning of individuals, and also as summary and review. Teachers should beware, however, of the notion that a learning experience must always be followed by such a test review. If such a scheme is used inevitably, rather than as a variant, it will become an experience to be dreaded rather than a pleasant excursion into meaning and value.

Formal Testing and Formal Examinations

As the function of examinations has gradually shifted, teachers have sometimes shown considerable impatience with the old, rigid methods of the examination system. This has resulted in a major shift of practice in the elementary school and the consequent abolishment of child examinations. With the advent of total promotion and homogeneous grouping, tests results are not needed to assure what was called *grading*. Testing is chiefly by informal methods supplemented by scales and standardized tests. Thus the old menace of subject-matter testing has passed from the elementary school. During the same period, high school and college teachers have become impatient with old

methods and have used many variants, some of which are not too sound. They have been adopted because the teachers have thought that poor testing was better than the old-time rigor and the formal examination. As long as the examination system remains, however, it serves as a necessary means for the administration to classify and grade students whose competitive position has real significance in the branches of academic life where ability is selective, and brightness of great importance. Consequently, teachers should not emasculate examinations by permitting students to keep their books open during tests or to take tests home and do them as mere exercises. The spirit of the examination system can best be fulfilled, when it is a demand of the administration, by the use of three equally weighted tests throughout a term, and by using tests of the type described above, which do not violate the canons of educational value. On the other hand, examination systems of the conspiratorial type, in which examinations are exalted to the pinnacle of academic life and regarded as the essential paraphernalia of scholarship, should no longer be promoted. The examination should not be a period of penal rigor, but rather a natural and functional assessment of the work of both student and teacher.

Standardized Tests

Standardized tests are a concern more of the school administration than of the classroom teacher. When they are not thus used by the administration, teachers who are trained to use them may do so if they wish to cover up the administration's lack. Standardized tests are too commonly used to require description here. The selection of the proper tests has become a work for the specialist, who should carefully match test to situation. Literally thousands of tests are in existence, and they come in and out of fashion as the seasons pass. They have all the value that a careful measuring instrument has in any trade. A battery of tests, given at term beginning and term end, can provide many useful

data to assist teachers in individual guidance of individual pupils in such skills as reading, spelling, arithmetic, and handwriting.

Unfortunately, administrations sometimes tend to use these tests to measure teacher efficiency. This is a dangerous and disagreeable practice, and it has all the educational evils that dictatorship and forced authority have in politics. It always injures teaching, because no test reader can know at what sacrifice of children's true learning the results have been achieved.

Nevertheless, in their true usage, standardized tests, because they make it possible to refer individuals to standard norms, help teachers to decide what is the next step in individual growth for each pupil. Diagnostic tests carry the process still further. They should not be given indiscriminately, however, but by a special testing officer, and never unless the proper remedial work is to be done later on.

Achievement Scales

A variant of the standard test is the achievement scale. Such a scale makes use of a principle of learning which is extremely sound, and of wide importance in all kinds of testing. This is that a learner is much encouraged by definite evidence of his own progress. If an individual's handwriting is scaled by such an achievement test at the beginning of the term, and again at each term end, there is an objective recognition of gain which is most encouraging. In learning situations, long-deferred goals are so remote that it seems to the learner that they can never be reached because of their very distance. If the distance is reduced to steps, and one step of improvement made, learning may be remotivated by the successful reaching of each intermediate goal.

Self-measurement

That is but an example of the fact that self-measurement and self-estimate are valuable aids to learning. In much of

what is learned, the pupil wants to know just where he is. If he knows how to spell all the words on the fourth-grade spelling list, he knows he has cleared that particular hurdle. Similarly, it is most useful to keep graphs of one's own progress, so that the mounting line in arithmetic achievement, or any informal situation, gives confidence because it objectifies the sense of progress. For this reason the results of measurement should be used in such a way that pupils can see progress and rest briefly on their laurels.

Intelligence Tests

Intelligence testing does not fall within the duties of the class teacher. It is a psychological service. When it is available, the psychologist should report intelligence results to the teacher, never to the pupil. Teachers who have such reports will find that they have some diagnostic value in understanding behavior and learning problems. There are few teachers, however, who cannot guess the intelligence quotient, within ten or fifteen points, of a pupil they have taught for a month or so. Intelligence tests serve teachers less than they serve psychologists who must have data concerning a child without the opportunity of knowing him for any length of time. An understanding of the nature and meaning of intelligence tests is necessary for teachers, however, since the necessity of interpreting their meaning frequently falls upon them. They should understand intelligence testing even if only to avoid the misuse of its results.

Individual Summaries

A personal written summary of a term's work made by a student is particularly valuable, especially for mature students.

The Work Folder

In some schools the practice is followed of a continuing work folder. At the end of each term the pupil places, in a decorated binder, samples of his best work throughout the

term. Paintings, decorated manuscripts, drawings, spelling papers, arithmetic sheets, any and every type of work that will lie flat is included. This folder is kept from term to term, and when the pupil leaves the school at the time of graduation, he combines all his work folders in one and takes the whole home as a souvenir of his triumphal progress. When it is taken home it becomes a matter of joyful record, and gives pupil and family a sense of secure accomplishment. This device is of infinite learning value.

Group Summary

In some cases, a group summary is most worth while near the term end. Nothing shows quite so clearly how very much has actually been done in the time spent in school. Such a written assessment, made by committees and individuals working together, is far more valuable than any mathematical summary of marks. It can take the form of a mere summary or of a class history.

Teacher Evaluation and Records as a Means to the Improvement of Teaching

An alert teacher is constantly scrutinizing the work of the class and his own plans and devices. Teacher records kept in writing are a great source of value in helping with the improvement of teaching. Not only are such records valuable, but a special record set aside for the following term, in which proposed changes and expected improvements are noted, is invaluable to the teacher when the new term arrives. If last term's notations are consulted when a new term begins, a term will seldom pass without some improvement in the teacher's own techniques and in the success of the students.

Teaching Comes to Its End

One of the baffling aspects of teaching is its evanescence. Just as the year ends with the scattering of leaves in the fall, leaving the forest dead and bare, so the last bell scat-

ters the members of the most congenial class. They are here today, but how thoroughly gone tomorrow. This solid class bursts with the thoroughness of a toy balloon.

The curtain falls on the last performance. The audience goes home and the cast is dispersed forever. If the play has been a success, and the producer is reasonably satisfied with the results, there must be some brief nostalgia for the days just lived through. But when teachers reach the end of teaching, they are tired. Strength has gone out of every true teacher. May the time never come when penurious administrations of politicians will take a day from his holiday. For the holiday is the source of that rest and buoyancy which must return as a teacher comes back eager for new pupils and a new term. In his imagination are the outlines of a fresh drama, more exciting than any he has produced before. In this hope teachers move willingly into the future.

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